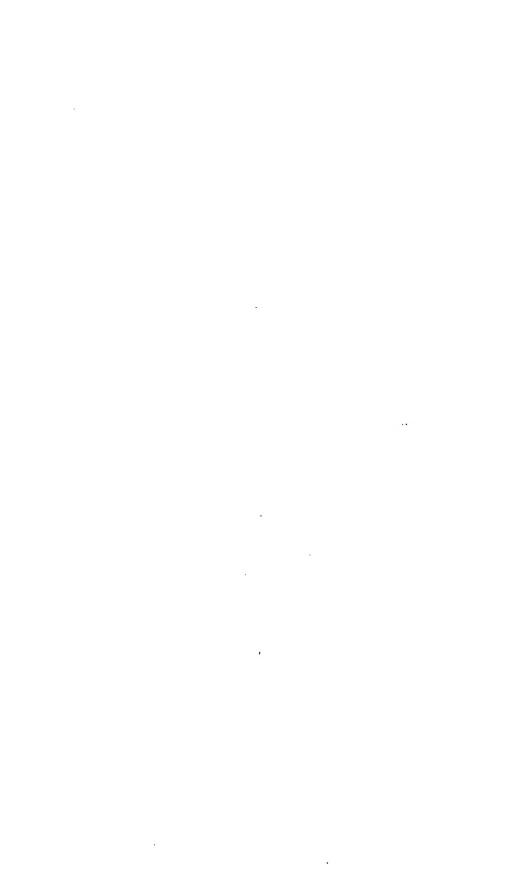HANS MARCHAND

THE CATEGORIES AND TYPES
OF PRESENT-DAY
ENGLISH WORD-FORMATION

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A SYNCHRONIC-DIACHRONIC APPROACH

BY

HANS MARCHAND

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OTTO HARRASSOWITZ · WIESBADEN

PREFACE

It is customary to begin a book with what the Ancients called the exordium, i.e. a statement why it was written. Books on English grammar are not wanting, but it is somewhat surprising to see how very few there are that deal with word-formation. This subject has been greatly neglected in grammatical works while the parts on phonetics, accidence and syntax have always received full attention. The last three decades have also seen the rise of phonemics. For the Romance languages we have the extensive treatises by Diez and Meyer-Lübke, for French those by Darmesteter, Nyrop, Meyer-Lübke, for German (to quote only the most extensive works on the subject) those by Wilmanns and Henzen. The first book on English word-formation was that of Herbert Koziol (Handbuch der Englischen Wortbildungslehre, Heidelberg 1937). It was planned as a condensation of earlier grammar accounts and monographs, but it is uncritical in that it proceeds without a previous inquiry into the essential problems of word-formation. The author proposes to give a historical description, but we get no clear insight into the derivational processes as no proper distinction is made between elements which are morphologically relevant and those which are not. The relations between stress and word-formation are not touched upon, nor are phonological changes involved by derivation.

Shortly before his death, Jespersen published the sixth volume of his Modern English Grammar, Morphology, which covers 'accidence' as well as wf. Though there are a few excellent chapters, the book is not one of the best Jespersen has written (as a matter of fact, many chapters were written by his assistants and later revised by him). We miss the same distinction between etymological and derivative (morphological) word elements we have observed with Koziol; we also miss a chapter on pre-particle compounds. When Jespersen's book appeared, the major part of my own was finished. In any case, the method Jespersen had followed was quite different from mine as the reader will find out for himself.

My sincere thanks are offered to all friends and colleagues, most of them at Bard College, Yale University, and the University of Florida, who answered questions and patiently bore the strain of 'informancy'. Their help has been invaluable for the clarification of linguistic problems. I should like to record the debt of gratitude which I owe to Professor Hans Krahe, Tübingen, for introducing me to the publisher of this book, and to the publisher for accepting the work. I owe a special debt to Dr. L. Reichert, publication manager, whose kind understanding and cooperation in the process of publication I cannot praise highly enough. I am indebted to Professor K. Schneider, Münster, for going over the manuscript and making valuable suggestions of a practical kind, and to Mr. Nigel Foxell, Tübingen, for reading the manuscript and improving it textually. Miss Martha Morril, Beverly Farms, Mass., read an earlier draft.   H. M.

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ABBREVIATIONS

ADD	Wentworth, American Dialect Dictionary (see Bibliography III)
ASp	American Speech (journal)
Bally	Linguistique générale (see Bibliography II)
Baugh	A History of the English Language. New York 1935
Bloch	Dictionnaire étymologique (see Bibliography III)
Carr	Nominal Compounds in Germanic. St. Andrews Univ. Publ. XLI. London 1939
DA	A Dictionary of Americanisms (see Bibliography III)
DAE	A Dictionary of American English (see Bibliography III)
Danielsson	Studies on the accentuation of polysyllabic Latin, Greek, and Romance loan-words in English, with special reference to those ending in *-able, -ate, -ator, -ible, -ic, -ical,* and *-ize.* Stockholm Studies in English. III. 1948
Darmesteter	Cours de grammaire historique (see Bibliography II)
DG	Hatzfeld, A., Dictionnaire général de la langue française (see Bibliography III)
Eckhardt	Die angelsächsischen Deminutivbildungen. Engl. Studien 32 (1903) 325—366
FEW	Wartburg, W. von, Französisches Etymologisches Wörterbuch (see Bibliography III)
Henzen	Deutsche Wortbildung (see Bibliography II)
Hietsch	Moderne englische Wortbildungselemente (see Bibliography I)
Je(sp.)/GS	Growth and Structure of the English Language ⁹1956
Je(sp.)/MEG	Modern English Grammar (see Bibliography I)
Je(sp.)/La	Language. Its Nature, Development and Origin. London 1922
Je(sp.)/Ling.	Linguistica (see Bibliography I)
Je(sp.)/PG	The Philosophy of Grammar. London 1924
Juret	Juret, A.-C., Formation des noms et des verbes en latin et en grec. Paris 1937
Kl	Kluge, F., Abriß der deutschen Wortbildungslehre (see Bibliography II)
KlEW	Kluge, F., Etymologisches Wörterbuch der Deutschen Sprache¹⁶, 1953
Ko	Koziol, H., Handbuch der englischen Wortbildungslehre (see Bibliography I)
MeAL	Mencken, H. K., The American Language (see Bibliography I)
M.-L.	Meyer-Lübke, W., Historische Grammatik der französischen Sprache (see Bibliography II)
Ny	Nyrop, Kr., Grammaire historique de la langue française (see Bibliography II)

OED	Oxford English Dictionary
OLA	Bloch, B. and Trager, G. L., Outline of Linguistic Analysis. Baltimore 1942
RD	The Reader's Digest
Reifer	Dictionary of New Words (see Bibliography III)
Rotzoll	Die Deminutivbildungen im Neuenglischen. Heidelberg 1910 (= Anglistische Forschungen 31)
Wi	Wilmanns, W., Deutsche Grammatik (see Bibliography II)
Za	Zandvoort, R. W., Wartime English (see Bibliography III)

a	ante		H	in the sense required here
ab.	about			
abl.	ablaut		IE	Indo-European
acc.	according		infl.	influenced, inflected
adj(s)	adjective(s)		int	interjection
adv(s)	adverb(s)		irr.	irregular
AE	American English			
AL	Ancient Latin		joc.	jocularly
app.	apparently			
arch.	archaic		L	Latin
			lit.	literally
beg.	beginning		LL	Late Latin
bibl.	biblical		LME	Late Middle English
c	circa		ME	Middle English
cb(s)	combination(s)		MHG	Middle High German
Ch	Chaucer		ML	Medieval Latin
CL	Classical Latin		MoE	Modern English
cpd(s)	compound(s)		MoL	Modern Latin
coll.	colloquial			
conn.	connected		naut.	nautical
			neg.	negative
der.	derivative, -ation			
dial.	dialectal		o(bs).	obsolete
dim(in).	diminutive		obl.	oblique case
Du	Dutch		occ.	occasionally
			OE	Old English
E	English		OF	Old French
Ec(s)	English coinage(s)		OGr	Old Greek
eccl.	ecclesiastical		OHG	Old High German
ex(s)	example(s)		ON	Old Norse
excl	exclamation		OTeut.	Old Teutonic
F	French		p.	person, page
f(r).	formed on, derived from		PE	Present-day English
fig.	figurative		pert.	pertaining
frequ.	frequentative		poet.	poetical
			P. Pl.	Piers Plowman
G	German		prec.	preceding
Goth.	Gothic		prf(s)	prefix(es)
Gr	Greek			

pron.	pronounced	Spl.	Supplement
pt(s)	particle(s)	St	Standard
ptc(s)	participle(s)		
		t.	type
		th.	thing
qu.	quotation, quoted	tr.	translating
		Tu	Turkish
rec.	recent, recorded		
rev.	revived	var.	variant
		vb(s)	verb(s)
		vs	verbal substantive
sb(s)	substantive(s)	vg	vulgar
Sc	Scotch		
Scand.	Scandinavian	wffb	word-formation (or word(s)
sf(s)	suffix(es)		formed) on a foreign basis of
sec.	second		coining
sg	singular		
Sh	Shakespeare	wfnb	word-formation (or word(s)
sl	slang		formed) on a native basis of
sp.	spelling		coining

SYMBOLS USED

...   designates the (content of a) word or radical in the analysis of composites

⌐ or ∟ designates heavy stressed syllable or member of composite

⌐ or ⌐ designates middle stressed syllable resp. member of composite

-/   indicates member of composite

*   following a word designates 'historical composites', i.e. such as have become monemes for synchronic analysis

1234   the date after a word refers to the first quotation for it in the OED

~   indicates phonemic, morphophonemic, or derivative opposition

[ ]   enclose phonetic symbols

/ /   enclose phonemic symbols

Vowels

i	as in	bee	u	as in	fool	ə	as in	above
ɪ		bit	ʊ		full	ʌ		but
e		late	o		go	aɪ		while
ɛ		let	ɔ		law	aʊ		house
æ		bat	ɒ		watch	ɔɪ		toy
ɑ		far	ɘ		bird	u		new

Consonants

p	as in	pit	ð	as in	this	hw	as in	*whi*le
b		bit	s		see	m		mill
t		till	z		zoo	n		not
d		do	š		she	ŋ		sing
k		cut	ž		measure	l		full
g		go	tš		watch	r		roll
f		full	dž		hedge	j		yet
v		vision	h		how	ḷ, m̩, n̩ indicate		
θ		thin	w		watch		syllabic l, m, n	

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I. INTRODUCTION

The term 'word'

1. 1. 1. In a book on word-formation, the term 'word' should first be defined. It is taken to denote the smallest independent, indivisible unit of speech, susceptible of being used in isolation[1]. A word may have a heavy stress, though some never take one. *To* preceding the 'infinitive' never has a heavy stress, but it is a word as it can be separated from the verbal stem by an adverb (as in *to carefully study*). A composite may have two heavy stresses so long as it is not analysable as a syntactic group. There is a marked tendency in English to give preparticles full stress though they do not exist as independent words. Indivisible composites such as *arch-enemy, crypto-communist, unlucky,* therefore are morphological units whereas combinations like *stone wall, gold watch* are syntactic groups. As for the criterion of indivisibility, we say that the article *a* is a word as I can interpolate words and groups of words between article and substantive (*a nice man, a very nice man, an exceptionally gifted man*). But *a* as in *aglitter* cannot be separated from the verb stem with which it forms a group and therefore is not a free morpheme (word). With regard to the criterion of isolability, we must not assume that all words can be used by themselves, in isolation. It is in the very nature of determiners like the article *the* to be used in conjunction with the word they determine, so we need not advocate Bloomfield's criterion of parallelism (*this thing : that thing = this : that : (the)*) to establish the word character of *the* (Language 179).

1. 1. 2. A word and, for that matter, any morpheme is a two facet sign, which means that it must be based on the significate/significant (F signifié/ signifiant) relationship posited by Saussure. By purely distributional criteria we may be led to regard as words such independent elements as meet the above requirements except that of the sign character. The phrase *make out* (as in *I cannot make him out*) is an unanalysable semantic unit, though formally this unit is broken up. The elements *make* and *out* distributionally behave like words, yet the semantic content of the phrase cannot be inferred from that of the constituents *make* and *out*. These elements do not function in the productive system where only meaningful units lead to analogic new formations. It might be said that we never in fact know when a pseudo-morpheme starts to become productive and that there are examples of unmeaningful sound

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[1] This definition combines the one given by Bloomfield (the word considered as the minimal independent unit of utterance; see Language 2, 1926, 156) and the criterion of inseparability advocated by many scholars, most recently by Martinet (see Actes du Sixième Congrès International des Linguistes, Paris 1948, 27). On the whole question see A. Rosetti, Le Mot. Copenhagen-Bucharest 1947.

groups becoming analysable and also productive, as *hamburger*, which certainly
is monomorphemic, has given rise to *cheeseburger, beefburger* and others. But
this happened because the shortening *burger* acquired the full semantic status
of *hamburger* in combinations. Thus it may be safely assumed that only
meaningful elements can become productive and that, whenever an un-
meaningful unit seemingly does attract new formations, this is so because it
has acquired sign character (see 4. 1. 7).

1. 1. 3.   The existence of unique semi-morphemic elements, occurring in
conjunction with signs only (as *cran-* in *cran-berry, Mon-* in *Mon-day*), is not
denied, but from the point of view of word-formation, such blocked mor-
phemes are of little value. Though identifiable (*cran-, Mon-* have distinctive
sememic features which make them opposable to other full or semi-mor-
phemes: *cran-berry* is distinct from *berry, blue-berry*, or *mul-berry, Mon-day*
is distinct from *day, Sun-day*, or *Tues-day*) they are not productive, at least
under normal circumstances.

Definition of the field of word-formation

1. 2. 1.   Word-formation is that branch of the science of language which
studies the patterns on which a language forms new lexical units, i.e. words.
Word-formation can only treat of composites which are analysable both
formally and semantically, as the remarks in the preceding paragraph have
already made clear. The study of the simple word, therefore, insofar as it is
an unanalysable, unmotivated sign, has no place in it. It is a lexical matter.
A composite rests on a relationship between morphemes through which it is
motivated. By this token, *do-er, un-do, rain-bow* are relevant to word-formation,
but *do, rain, bow* are not.

1. 2. 2.   The terms 'analysable composite' and 'motivation' require some
comment. Saussure admitted as motivated signs combinations of full signs
only, which are grammatical syntagmas. He explicitly states that expressive
words are unmotivated signs. This means that they would not be relevant to
word-formation. I do not subscribe to this opinion and have given my reasons
for it elsewhere (7. 19). While admitting that we have complete motivation
only in combinations composed of full linguistic signs, i.e. combinations
intellectually motivated by the significates (as in *rain-bow, do-er, un-do* where
a certain form goes with a certain underlying concept) we find that this is not
the only kind of motivation that occurs in the coining of new words. This
book, therefore, will deal with two major groups: 1) words formed as gram-
matical syntagmas, i.e. combinations of full linguistic signs, and 2) words
which are not grammatical syntagmas, i.e. which are composites not made up
of full linguistic signs. To the first group belong Compounding, Prefixation,
Suffixation, Derivation by a Zero Morpheme and Backderivation, to the
second Expressive Symbolism, Blending, Clipping, Rime and Ablaut Gemi-
nation, Word-manufacturing. A detailed discussion will be found in the
introductory chapters to each category. What is common to both groups is
that a new coining is based on a synchronic relationship between morphemes.

Where there is no relationship in praesentia, we have to do with a moneme. That *chap*, for instance, is historically derived from *chapman*, is of no synchronic relevance. For the present-day speaker, no such relationship exists, therefore *chap* is a moneme.

1. 2. 3.   As for derivatives of group 1), we have to state that a derivative is a syntagma consisting of a determinant and a determinatum, whether we have a compound (e.g. *head-ache*), a suffixal derivative (e.g. *father-hood*), or a prefixal derivative (e.g. *un-do*). Both parts are morphemes, i.e. signs based on a significate/significant relation. In the event of full compounds, the syntagma is opposable to either morphemic element (*head-ache* to *head* and *ache*). Prefixal and suffixal derivatives must be opposable to their unprefixed and unsuffixed bases (*un-do* to *do*, *father-hood* to *father*) and to other derivatives containing the same dependent morpheme (*un-do* to *un-fasten*, *un-roll* etc., *father-hood* to *mother-hood*, *boy-hood*, etc.).

1. 2. 4.   The process called backderivation (backformation) has diachronic relevance only. That *peddle* vb is derived from *peddler* sb through reinterpretation is of historical interest. However, for synchronic analysis the equation is *peddle : peddler = write : writer*, which means that the diachronic process of backderivation does not affect the derivative correlation for present-day speakers who do not feel any difference between the relationship *write : writer* on the one hand and *peddle : peddler* on the other.

1. 2. 5.   The derivative element may be absent in the significant of the derivative in which case we speak of derivation by a zero morpheme (*father* vb 'treat as a father', *idle* vb 'be idle' etc.). While admitting the possibility of contrary analyses I think such cases are less frequent than R. Godel[1] seems inclined to admit. The one example he adduces in support of contradictory analysis is open to doubt. The equation *scier : scie-O = hâcher : hâchoir, passer : passoire* does not hold from the point of view of the significate: the action of 'passer' does not presuppose the existence of a 'passoire' (any more than a tamis or filtre) nor is the action of 'hâcher' subject to the existence of a 'hâchoir' (one could chop with any kind of knife). Yet one cannot 'saw' without a 'saw', i.e. the concept 'saw' is implied in the verbal concept 'saw'. Though the problem is more complex than this isolated case suggests the general principle will be to assume that the concept which for its definition is dependent on the concept of the other pair member must be considered that of the derived word. Applied to *scier ∼ scie* it means that *scier* is the marked form, derived by a zero morpheme from the sb *scie*.

1. 2. 6.   From what has been stated (in 1. 1) about the syntagmatic character of derived words it is evident that whenever a word is not analysable as consisting of two morphemes it is a moneme, not a derivative. *Defense, apply* are opposable as whole units only, not to *fence, ply* (as far as the signs are concerned which are not identical with the sound clusters of the second syllable

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[1] R. Godel, *La question des signes zéro*, Cahiers Ferdinand de Saussure 11 (1953) 37—38.

-fence, -ply). It thus follows that the study of aphaeretic words is not relevant to word-formation which disposes of the respective chapters in Koziol[1] and Jespersen[2].

1. 2. 7.   It should be clear that loans from other languages, unless they have become analysable syntagmas (as e.g. *dis-agreeable* and *trans-alpine* in English) have no place in a study of word-formation. Koziol makes no distinction between derivative morphemes (i.e. parts of analysable syntagmas) and etymological elements in loan words. Monemic words such as *crisis, frenzy, lassitude* (under the "suffixes" *-sis, -sy, -tude* respectively) and many others are jumbled together with real derivatives such as *bak-er, father-hood, shy-ness*.

1. 2. 8.   Koziol has a chapter "Irrtümliche Wortabgrenzung" where he treats of the 'coining' of new words by erroneous division such as *an apron* from *a napron, an adder* from *a nadder*. Such phenomena are nothing but accidents of la parole. The significate of *napron* has not been modified by the change to *apron*. *Apron* has remained the moneme which *napron* was (for the English speaker). And *adder* continues as the significant of the significate of *nadder* without any change in content. Neither word is opposable to its predecessor *napperon* and *nadder* respectively which have ceased to exist with the new significant. The formal change is merely a historic substitution of one form for another. Another chapter is entitled "Mißdeutung der Singular- oder Pluralform", dealing with such words as *cherry* from *cheris* (from Anglo-Norman *cherise*), *riddle* from ME *redels* (from OE *rǣdelse*), *pea* from ME *pese*. The objections raised in the case of 'erroneous word-division' apply here, too, though one might object that a moneme ending in *-s* has been reinterpreted as 'moneme / plural morpheme'. Yet an inflectional morpheme has not a primarily semantic value, it forms an inflected form of one and the same word, not a new lexical unit. Inflectional morphemes, therefore, are not relevant to word-formation.

Derivative relevancy and descriptive analysis

1. 3. 1.   It has been argued against my approach that "the unproductiveness of one of the morphemes is not a fatal bar to analysis"[3]. This point can be argued in several ways. The composition of the words *halfpenny* and *twopence*, pronounced [hepənɪ], [tʌpəns] is still recognizable to the speaker of English. We may consider [he] an allomorph of /hæf/, [pənɪ] and [pəns] allomorphs of /penɪ/ and /pens/ respectively, thus giving the words the status of full compounds. However, descriptive analysis of words and derivative relevancy are not the same thing. While we have analysed the preceding combinations in terms of allomorph-containing compounds, it must be pointed out that the

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[1] H. Koziol, Handbuch der englischen Wortbildungslehre (Heidelberg 1937) §§ 658—659, 674—675.

[2] O. Jespersen, *A Modern English Grammar* (Copenhagen 1942) VI. 29. 81.

[3] C. E. Bazell in Word 8 (1952) 38f. against my article 'Phonology, Morphonology, and Word-formation', Neuphil. Mitt. 52 (1951) 87—95.

very fact of phonic change of one of the constituents contrasts with a relevant feature of compounding in English, viz. the preservation of the phonic character of the constituents versus their use as independent words. No first-word changes, and, with the exception of *man* and *berry* (in a few cases also *land*, as in *Finland*, *Scotland*), no second-word does either. In British English (not in American English), *berry* reduces the first vowel to [ə] while with *man* the reduction is common to both American and British English, but represents an unstable pattern (*policeman*, *seaman* etc. are regular with [ə], but *milkman*, *mailman* and others vary). Historically, the phenomenon is explained by the fact that the words *man*, *land*, and *berry* have been frequent as second-words from the oldest times of the language known to us. They have thus acquired a semi-suffixal character. Note that the pronunciation [lənd] occurs only with ethnic names, not in recent compounds such as *homeland*, *fatherland*, *dreamland*, and that similarly the vowel is not reduced in *man* when the concept 'man' is fully present in the significate.

1. 3. 2.   It is therefore not enough to give a descriptive analysis of a composite in terms of morphemes and allomorphs, we also have to state what is the position of those linguistic forms within the structural system of a given language. In the case of English compounds we have seen that no changes of vowel or consonant take place when an independent morpheme becomes the constituent of a compound. Exceptions to this rule are therefore indicative of formation outside the present-day stage of linguistic structure. Let us apply the same method to the analysis of suffixal derivatives.

1. 3. 3.   What have we gained if some speakers analyse *collier* as 'a man who digs coal' (no speaker of American English would use the word *collier*) or connect *grazier*, *brazier*, *glazier* (terms hardly used in American English) with *grass*, *brass*, *glass*? Considering *-ier* as an allomorph of denominal *-er* we find that the phonic changes which distinguish the independent words from their forms as elements of suffixal derivatives are not those usually observed in derivation (e.g. *breathy* 1528, *frothy* 1533, *earthy* 1555, *lengthy* 1759)[1]. We would be acting very unwisely if we rejected such valuable diachronic help and accepted on equal terms the two derivative alternations /θ ∼ ð/ (*north* ∼ *northern*) and /θ ∼ θ/ (*earth* ∼ *earthy*). Both are still clearly discernible in a 'descriptive analysis of words', but only the latter is a relevant derivative feature in the system of present-day English.

1. 3. 4.   A mere reference to quantitative occurrence will not do. In the case of derivation from English words ending in voiceless fricatives we may actually find more examples of the older type and still know that present-day English derives as stated above. Productivity of a derivative type therefore cannot be overlooked in a correct description of a linguistic system, and the linguist who neglects this particular factor will be counting 'dead souls' as live people[2].

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[1] See 4. 1. 32—35.

[2] Zellig S. Harris, *Methods in Structural Linguistics* (Chicago 1951) 255: "the methods of descriptive linguistics cannot treat of the degree of productivity of elements".

Word-formation on a native and on a foreign basis

1. 4. 1.   Bearing in mind the bi-morphemic, i.e. two-sign character of deriv-
atives and the ensuing opposability of both elements, it seems a little embarrass-
ing to revert to the topic of the analysis of *conceive, deceive, receive* described
as bi-morphemic by Bloomfield[1], Harris[2], and Nida[3]. Newman[4] establishes
such suffixal derivatives as *horr-or, horr-id, horr-ify; stup-or, stup-id, stup-efy.*
What are the bases *horr-* and *stup-* and what are the meanings of the suffixes?
With the exception of *stupefy* which by forced interpretation could be made
to look like a syntagma, none of the 'derivatives' is analysable into two signif-
icates. In a recent article, H. Frei[5] has again underlined the "présence in-
dispensable du signifié". The fact that we can align such formal series as *con-
tain, de-tain, re-tain; con-ceive, de-ceive, re-ceive* does not prove any morphemic
character of the formally identical parts as they are not united by a common
significate. The preceding words are nothing but monemes. *Conceive, receive,
deceive* are not comparable to syntagmas such as *co-author* 'joint-author', *re-do*
'do-again', *de-frost* 'remove the frost' the correct analysis of which is proved
by numerous parallel syntagmas (*co-hostess, co-chairman, co-defendant; re-
write, re-hash, re-furbish; de-gum, de-husk, de-horn*). If the two series *con-tain,
de-tain, re-tain* / *con-ceive, de-ceive, re-ceive*, through mere syllabication and
arbitrary division of sound complexes yield morphemes, why should we not
be allowed to establish the similar morpheme-yielding series *ba-ker, fa-ker,
ma-ker* / *bai-ling, fai-ling, mai-ling*? If we neglect content, how can we expose
such a division as nonsensical? The theoretical problem of "la non-unicité des
solutions possibles" has been pointed out by H. Frei[6]. In actual fact, nobody
would think of making the wrong morpheme division as our memory keeps
perfect store of free and bound morphemes as significant/significate relations.
It is only with a certain restricted class of words of distinctly non-native
origin that we fall into the error of establishing unisolable morphemes. This
leads us to a question of structural analysis I have dealt with in several places[7].

1. 4. 2.   If *receive, deceive, conceive* are matched by the substantives *reception,
deception, conception*, this is so because Latin verbs in *-cipere* are anglicized as
verbs in *-ceive* while the corresponding Latin substantives *receptio, deceptio,
conceptio* in English have the form given above. The alternation *-sume* vb
-sumption sb is obviously restricted to pairs corresponding to the Latin alter-
nation *-sumere* vb *-sumptio* sb. Nobody, unless he was trying to be witty,
would extend the correlative pattern to pairs of words outside the particular
structural system to which the words ultimately belong. Rime with *receive/
reception* could not make anyone derive *believe/beleption* nor would the pattern
consume/consumption produce *loom/lumption, boom/bumption*. The natural

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[1] Language 209 and 242.   [2] Op. cit. 161.
[3] E. Nida, Morphology. The Descriptive Analysis of Words. Second Edition.
Ann Arbor. Univ. of Michigan Press 1949, p. 162, see also 191.
[4] Stanley S. Newman, *English Suffixation: A Descriptive Approach.* Word 4
(1948) 32.
[5] *Critères de délimitation*, Word 10 (1954), 139.   [6] Ib. 142.
[7] Neuphil. Mitt. 52 (1951) 92—94; 54 (1953) 254—258; 55 (1954) 297—300,
Studia Linguistica 5 (1951) 95—98.

synchronic description will therefore deal with foreign-coined words on the basis of the structural system to which they belong.

1. 4. 3.   With regard to compounding, prefixing, and suffixing, word-formation proceeds either on a native or on a foreign basis of coining. The term 'native basis of coining' means that a derivative must be analysable as consisting of two independent morphemes (in the event of a compound as *rain-bow*) or of a combination of independent and dependent morpheme (in the case of prefixal and suffixal derivatives as *un-just, boy-hood*). By word-formation on a foreign basis of coining I understand derivation on the morphologic basis of another language. In English, French, and German, to give three principal European languages, most learned, scientific, or technical words are formed on the morphologic basis of Latin or Greek. We may speak of this derivation as word-formation on a Neo-Latin basis, as Neo-Latin comprises Greek patterns as well and has frequently extended Old Greek patterns so that they are more rightly Neo-Latin than Old Greek. I will illustrate the principle by English examples.

1. 4. 4.   There are various degrees of foreignness. 1) A word may appear as a complete alien in Neo-Latin form, as *hyper-aesthesia, panopticon, panorama, post-abdomen, pre-retina / nectarium, spermarium.* 2) A combination has an English form but is not analysable as a composite on an English basis. Examples are *insecticide, pomiculture, spermaduct / amorphous, alogous, hypertrophy / barbate, barbellate, funambulist, pugilist.* 3) A combination is derived on a Neo-Latin basis but its elements can be analysed as allomorphs of English morphemes: in *an-electric, an-* is considered an allomorph of *a-*, in *scient-ist, scient-* can be considered an allomorph of *science.* 4) A combination consists of two non-native elements which are, however, combined on a native basis, as *hyper-sensitive, action-al.*

1. 4. 5.   Koziol's book does treat of 'foreign' suffixes without which a book on English word-formation would be unthinkable, but he never undertakes to describe derivative patterns. The problem is not even realized. "Afrz. *-te* (lat. *-tātem*) entspricht im Engl. die Nachsilbe *-ty* in *faculty* (me.), *honesty* (me.) . . . *ferocity* (1606). Neubildungen sind *virtuality* (1483), *shrievalty* (1502), *capability* (1611) . . ." (168). We are not told by what process words which are analysable under certain conditions only (into which the author has obviously not inquired) lead to new formations. That the suffix, by the way, is not *-ty* (except in the case of *shrievalty* which belongs with *mayoralty* where the analysis is more properly sb + *-alty,* cp. the recent coining *squirealty* 1856) but *-ity* Koziol has not realized. At best he explains derivatives on a Neo-Latin basis as formed "nach dem Muster zahlreicher Entlehnungen" (182 and passim), yet exactly what those patterns are we never learn. But in a book in which the fundamental principle of word-formation itself, the syntagmatic character of the derivative pattern, is only half realized, it is perhaps vain to look for a distinction which concerns the morphologic structure of the significant only.

1. 4. 6.   On principle, I have only treated those combinations which are analysable on a native basis, including, however, the Latin-coined types described in 4. 16. This leaves out most combinations of group 1); they are nothing but Neo-Latin compounds or preparticle compounds in anglicized

form, with the exception of those scientific terms whose constituent elements exist as independent (learned or scientific) words, such as *post-abdomen, pre-retina*. The distinction made also excludes the types of group 2). Combinations of group 3) have been included, though they show formal peculiarities which mark them as coined on a NL morphological basis. The changes which prefix formations undergo are of minor importance, anyhow. The foreignness of words belonging to the type *scientist* is more in evidence, but the radical is immediately connected with the word it represents in English. For more detailed discussion see 3. 1. 5. 5ff. and 4. 1. 13ff.

Border-line cases are not wanting. I have, for instance, included among suffix formations such words as *pugilist, funambulist* which are not analysable on a native basis, on the ground that they show the productivity of *-ist*. They are suffix formations on a NL basis though the proper Latin words are *pugil* resp. *funambulus*. On the other hand, I have legitimately treated words of the type *musicianer* which are suffixal extensions of an earlier simple word. Another case is that of the *adapting termination*. An outstanding example is verbal *-ate* which in the majority of cases adapts actual or possible Latin verbs in *-are*. But it has also formed words on a native basis (as *missionate, hyphenate* a.o.) and is, moreover, largely connected with sbs in *-ation*, so I have included *-ate* and similar sfs which have derivative as well as adapting character (*-arian, -ous* etc.).

Synchronic and diachronic method

1. 5. 1.   Two principal methods are applied in the science of language: the synchronic and the diachronic one. With regard to word-formation, the synchronic linguist would study the present-day system of formative types while the scholar of the diachronic school would write the history of word-formation.

The chief purpose of this book is synchronic: to illustrate those derivative types which characterize the present-day English linguistic system. At the same time I have made a tentative effort to describe the growth of these structurally relevant types in the past stages of the language. This explains why I have called my approach 'synchronic-diachronic'. The book is not a history of English word-formation, a task most difficult to undertake at present, anyway, as there are only a very few monographs describing the history and growth of certain types. It also follows that the reader will not find a discussion of extinct patterns of word-formation, either. The method of this book has little in common with the so-called historic method of older scholars (still followed by Henzen in his Deutsche Wortbildung), which is partly diachronic and partly comparative. These books do not give an idea of how a certain system of word-formation evolved, nor do they show what the relevant formative types were in a given older stage of the language. Least of all do we get a description of the patterns characterizing the present-day structure of the language. For a detailed account of this method see my article in *Dialogues* 3. 165ff., esp. 165—166.

1. 6.   This book is not 'structural' in the specified meaning the term has today. I have treated alternations only insofar as they have or have had

derivative character. Mere semantic correlation is not enough to establish a phonological (phonemic) resp. morpho-phonemic opposition. I see no point in (morpho-phonemically) opposing F *dossier/dorsal, oeillade/oculaire* (Gougenheim p. 59). Jespersen also, though not for structural reasons but because he is predominantly historically interested, contrasts derivationally unconnected pairs. One example out of the many the reader may look up for himself is the following. "Often a more Latin(ized) derivative form corresponds to a radical in originally F form: *double/duplicity, noble/nobility, simple/simplicity, sober/sobriety*." (VI. 24. 94.) The essential point for the French as well as the English pairs is that the respective members are coined on two heterogeneous formative bases, the first on a native, the second on a Latin basis of coining. Semantically they are connected, to be sure, but in a book on word-formation where we deal with derivative patterns, such oppositions are of little value. For the speaker, *dine* and *dinner*, *maintain* and *maintenance* and many others are semantically connected, but a derivative connection has not developed out of such pairs, so their opposition is not relevant to word-formation.

I disagree with analyses like the one Bloomfield gives for the word *duchess* (the whole passage is too long for quotation, but it should be read in its entirety: ch. 10. 6, p. 167f. in Language): "The complex form *duchess* [dʌtʃis] consists of the immediate constituents *duke* [djuwk] and *-ess* [is] ... The [juw] of *duke* is replaced by [ʌ], and the [k] by [tʃ]." Such analyses falsify the actual morphologic relations. The reader is apt to get the misleading idea that there is a morpho-phonemic relation as of /ju ∼ ʌ/ resp. /k ∼ tš/ in English.

Bally's descriptive method also cannot do justice to the problem of word-formation. Bally is really concerned with the significate rather than the significant (in contrast with Bloomfield whose primary interest is the significant) which leads him to treat structurally different words (*cheval/chevaucher* 184, *équestre/cheval* 181) as connected: "*équestre* a un radical échangeable avec *cheval*" (181). It does, but only from the standpoint of the significate. The term "transposition" cannot be fruitfully applied to word-formation, unless we keep strictly apart the two planes of significant and significate.

The importance of types

1. 7.   Whatever mankind creates in the way of civilization is based on forms. There are forms of art, literature, forms of social life etc., and it is these which are characteristic of a certain structural system. The existence of individual creations outside established patterns is of course not denied. But the isolated does not count as representative of the structural system. This is why we have treated word-formation under the aspect of types.

The scope of this book

1. 8.   My intention has been not to give the fullest possible list of examples, but to offer a description of the trends of word-formation by a picture of the various formative types. I have included neologisms as far as is possible and necessary. I have certainly left out many words which seem important to this

or that critic. My word lists do not pretend to be exhaustive. To be complete is impossible, anyhow, as new words are coined every day. Discrimination has not always been an easy task. In American English, there is a feverish production of words. A look at American magazines such as *Life* and *Time* or at the new coinages discussed in the linguistic journal *American Speech* gives the impression that there is a mass production of new words growing from day to day and that the language is developing rapidly. As a matter of fact, many of those neologisms are coined for the sheer pleasure of coining, as stunts. Newspapermen, radio speakers, comic-strip artists play a great role in the production of words. Some papers seem to make it a point to present the public with a couple of new words in every number issued. Only a few finally prevail. There is the case of *-ine* words which came in during the middle 80's, as *actorine*, *chorine*, *doctorine*, *dudine*, *knitterine*, coined after *heroine* (see ASp 3 1927—28, 368 and 447). But all these words are now obsolete, if they ever acquired currency. Countless grotesque words in *-itis* are incessantly coined, but none of them has so far passed into StAE. Their occurence in newspapers, as I have already pointed out, proves nothing at all. Newspapers have a language of their own[1].

Arrangement of prefixes and suffixes

1. 9.   As prefixes do not belong to a definite class of words, I have made no subdivisions at all, but given them in their alphabetical order. Koziol subdivides into native and foreign prefixes, while Jespersen has the inconsistent subdivisions 'Negative and related prefixes' (i.e. the criterion is one of meaning), 'Prepositional prefixes' (i.e. the criterion is one of function), 'Prefixes concluded' (those prefixes which fit neither, i.e. there is no criterion at all). As for suffixes, Koziol treats them partly under the aspect of function, partly of meaning, partly that of supposed original function only. In this way, *-ster* comes to be dealt with under the heading 'feminine suffixes' where no one would look for it; *-er* is discussed both under the headings 'masculine personal suffixes' and 'names of things'; *-age, -dom, -ment* are listed under 'concrete nouns' as well as 'abstract nouns'; such suffixes as *-an, -ant, -ese* appear both in the chapter 'substantival suffixes' and 'adjectival suffixes', and so on. To avoid overlapping of treatment in different chapters I have dealt with suffixes as well as prefixes in alphabetical order. I see no reason why a treatise on PE wordformation should be subdivided according whether a morpheme is native or not, in the latter case again according to French, Greek or Latin origin. Nor do I see the characteristic feature of a suffix in its sounds (the older grammars and Jespersen). That, for instance, a suffix contains a sibilant does not justify a chapter in which *-ess, ness, -ish, -ous* etc. are treated together (Jespersen). At the end of the book, however, the reader will find an index where the prefixes and suffixes are arranged according to their functions and principal sense groups.

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[1] For a full treatment of American tendencies in the coining of words see Krapp and (more extensively) Mencken, for shorter surveys L. Pound (Research in American English, ASp V. 359ff. (1930; reprint) and American English Today, repr. from Studies for William A. Read, Louisiana State University Press, 1940, 109ff.).

II. COMPOUNDING

The term 'compound'

2. 1. 1. When two or more words are combined into a morphological unit, we speak of a compound. The principle of combining two words arises from the natural human tendency to see a thing identical with another one already existing and at the same time different from it. If we take the word *rainbow*, for instance, identity is expressed by the basic *bow*: the phenomenon of a rainbow is fundamentally a bow. But it is a bow connected with the phenomenon rain: hence the differentiating part *rain*. The compound is thus made up of a determining and a determined part. In the system of languages to which English belongs the determinant generally precedes the determinatum. The types which do not conform to this principle are either syntactical compounds (e.g. *father-in-law*) or loan-compounds (e.g. *MacDonald, Fitzgerald*) with the "inner form" of a non-English language. There is a very interesting article by Stefán Einarsson, Compounds of the *mann-skratti* type[1]. Icelandic *mann-skratti* means 'devil of a man' and thus represents a type of combination in which the determinatum precedes the determinant. It is worthy of note, however, that all those compounds have an emotional character which reminds one of emotional forms of poetic word order in German, used in address only: *Brüderlein fein; ach Mutter mein; o Jesulein süß*. It would thus appear that the type of inverted word order is somehow tied up with emotional motivation. We observe the same sequel with derivatives by appreciative suffixes, endearing, derogatory, and otherwise; *dadd-y*, G *Väter-chen, blu-ish*. This is only a statement of a phenomenon, not an explanation. The determinatum is the grammatically dominant part which undergoes the changes of inflection. On the other hand, its semantic range is considerably narrowed as the second-word of a compound, determined as it is by the first-word.

Compounds with a zero morpheme

2. 1. 2. A compound, we have said, has two constituent elements, the determinatum and the determinant. There are, however, many combinations which do not seem to fulfill this condition. The essential part of the determinatum as a formal element is obviously missing in such types as *pickpocket, runabout, overall, blackout, dugout*, the bahuvrihi types *hunchback, paleface, five-finger, scatterbrain*. A *pickpocket* is neither a *pick* nor a *pocket*, a *hunchback* is neither a *hunch* nor a *back*, and so on. In all of the preceding combinations the basis, the determinatum, is implicitly understood, but not formally expressed. The combinations are compounds with a zero determinatum (also called exocentric compounds, as the determinatum lies outside the combination).

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[1] Studies in Honor of Albert Morey Sturtevant, University of Kansas Publications, Humanistic Studies No. 29, Lawrence 1952, 47—56.

Synthetic compounds

2. 1. 3.   A similar concept underlies combinations of the type *househoulder*.
The analysis of *householder* is parallel to that of *pickpocket*: 'one who holds a
house'. The difference is that *householder* has a formal determinatum (*-er*)
whereas *pickpocket* has not. However, the conceptual analysis clashes with a
word-forming principle in English. *Householder* cannot be considered a suffixal
derivative from the basis *household* in the way that *old-timer* or *four-wheeler*
are derived from *old time(s)* resp. *four-wheel(s)*, as there is no compound verb
type *to household* in English. The modern type *to brainwash* is of quite recent
development and is not nearly so well established as the type *householder*,
which is very old (in its present form, extended by *-er*, it goes back to late Old
English while the original OE type *man-slaga* 'man-killer' is Indo-European;
cp. L *armiger, signifer, artifex*). The idea of verb/object relation could combine
with the concept of agent substantive only by way of joining an agent noun
created ad hoc as a pseudo-basis to a common substantive. We are thus faced
with the fact that an analysis which considers the underlying concept only
may be disavowed by the formal pattern. The formative basis of combi-
nations of the type *householder* is the agent substantive, however artificial
the analysis may sometimes appear. A *skyscraper*, though not naturally
analysable as 'a scraper of the sky' but '(a building which) scrapes the sky',
from the formative point of view must be understood as a compound with
scraper as the basis. This type of compound therefore is not the primary
one which arises from combining two fully independent common substan-
tives (as in the type *rainbow*). Because of their 'forcible' character, such
compounds have been termed synthetic compounds (in German they are
called *Zusammenbildungen*).

2. 1. 4.   Parallel to the type *householder* are the types *housekeeping* (sb) and
heartbreaking (adj). The second-words of such combinations do not often
exist as independent words: *holder, keeping, breaking* are functional derivatives,
being respectively the agent sb, the action sb, and the first participle of the
underlying verbs. Strictly speaking, they should not figure in a dictionary,
which is an assemblage of semantic units. The lexical value of, say, the word
crasher is nil, as the word represents nothing but the aspect of actor of the
verb *crash* whereas *gate-crasher* is a lexical unit. In the same sense the second
elements of most compound impersonal substantives of the type *housekeeping*
and of most compound participles of the type *heartbreaking* are semantic
units only in conjunction with their first-words. In a similar way, other com-
binations with participles as second-words are synthetic compounds: *cooking*,
going, working are not adjectives, but preceded by adjectives or locative
particles they form compounds (*quick-cooking, easy-going, hard-working /
forthcoming, inrushing, outstanding*). *Eaten, bred, borne, baked, flown, spread* are
nothing but participles, but *moth-eaten, home-bred, air-borne / fresh-baked, high-
flown, widespread* are compounds.

2. 1. 5.   The non-compound character of extended bahuvrihi combinations is
manifest. *Hunchbacked, palefaced, five-fingered, knock-kneed* are not analysable
into the immediate constituents *hunch + backed, pale + faced* etc.; the

determinatum is always -ed while the preceding compound basis is the determinant. Extended bahuvrihi adjectives therefore are suffixal derivatives from compounds or syntactic groups. Exactly parallel are combinations of the types *old maidish* and *four-wheeler*.

Compounds with composite constituents

2.1.6. One of the constituent members of a compound may itself be a compound. In German, the determinant as well as the determinatum occur as compounds (*Rathaus-keller, Berufsschul-lehrer, Stadt-baurat, Regierungs-baumeister*). The regular pattern in English, however, is that of the determinant being a compound (*aircraft-carrier, traffic signal-controller, flower pot-stand, plainclothes-man, milktruck-driver* etc.) whereas in the event of a compound determinatum the whole combination usually becomes a two stressed syntactic group (*night wátchman, village schoólmaster, hoúse doórkeeper*). The two regular cases of a compound determinatum in English I can think of are substantives whose second constituent is a preparticle compound, as *báby oùtfit, oíl oùtput*, and substantives whose second element is the semi-suffixal determinant *-man* (with a reduced vowel), as in *tráffic polìceman, hát sàlesman*.

The criterion of a compound

2.1.7. What is the criterion of a compound? Many scholars have claimed that a compound is determined by the underlying concept, others have advocated stress, some even seek the solution of the problem in spelling. H. Paul says that "die Ursache durch welche eine syntaktische Verbindung zu einer Zus. wird, ist darin zu suchen, daß sie ihren Elementen gegenüber in irgendeiner Art isoliert wird"[1]. By isolation he understands difference in meaning from a syntactic group with the same words, and treats as compounds such phrases as *dicke Milch, das goldene Vlies* which are what Bally terms 'groupes locutionnels'. H. Koziol[2] holds that the criterion of a compound is the psychological unity of a combination, adding that there "seems to be" a difference of intonation between a compound and a syntactic group which it is, however, difficult to describe. W. Henzen[3], who discusses at some length the diverse definitions, decides on "the impossibility of a clear-cut distinction" between a compound and a syntactic group and hesitatingly proposes to consider a compound as "den mehrstämmigen Ausdruck einer Begriffseinheit, der zusammengeschrieben wird". This is a very weak definition, and he admits that the German separable verbs do not fit it. Bloch-Trager[4] do not treat the question in detail; they call a compound "a word made up wholly of smaller words", specifying that both of the immediate constituents must be free forms.

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[1] H. Paul, *Deutsche Grammatik*. Band V. Teil IV. Wortbildungslehre (Halle 1920) 4.
[2] pp. 46—47.
[3] p. 44.
[4] B. Bloch-G. L. Trager, *Outline of Linguistic Analysis* (Baltimore 1942) 54, 68.

2. 1. 8.   Stress also has been advocated as a criterion. "Wherever we hear lesser or least stress upon a word which would always show high stress in a phrase, we describe it as a compound member: *ice-cream* 'ajs-'krijm is a compound, but *ice cream* 'ajs 'krijm is a phrase, although there is no denotative difference of meaning."[1] Kruisinga[2] makes no difference at all between a compound and a syntactic group, at the same time feeling the need to maintain the traditional concept of compound. He defines the compound as "a combination of two words forming a unit which is not identical with the combined forms or meanings of its elements". In a similar way, Bally defines the compound as a syntagma expressive of a single idea[3]. Jespersen also introduces the criterion of concept and rejects Bloomfield's criterion of stress. "If we stuck to the criterion of stress, we should have to refuse the name of compound to a large group of two-linked phrases that are generally called so, such as *headmaster* or *stone wall*." This is certainly no argument, nor is the objection that words such as *sub-committee, non-conductor* have forestress according to Jones, but level stress according to Sweets. The first elements are not independent morphemes, anyway. For this reason it is wrong to argue that "the prefixes *un-* (negative) and *mis-* are often as strongly stressed as the following element; are they, then, independent words?"[4] If it rains, the ground becomes wet. But if the ground is wet, we are not entitled to the conclusion that is has rained. As for the criterion of stress, we shall see that it holds for certain types only.

2. 1. 9.   That spelling is no help in solving the problem I will add for the sake of completeness only. A perusal of the book Compounding in the English Language[5], which is a painstaking investigation into the spelling variants of dictionaries and newspapers, shows the complete lack of uniformity. The fact that a compound-member cannot serve as a constituent in a syntactic construction is no criterion of a compound. Bloomfield (Language p. 232) argues that "the word *black* in the phrase *black birds* can be modified by *very* (*very black birds*), but not so the compound-member *black* in *blackbirds*". This argument holds for phrases as well. We could not modify the first elements of *black market, Black Sea* by *very*, yet the phrases are not compounds, as they do not enter the stress type of *blackbird*. A similar argument is used by Bloch-Trager (Outline of Linguistic Analysis 66) who point out that we cannot insert any word between *black* and *bird* as members of the compound *blackbird*. This is correct, but neither can we split up the group *bláck márket* which is a double stressed syntactic group with a specified meaning.

2. 1. 10.   For a combination to be a compound there is one condition to be fulfilled: the compound must be morphologically isolated from a parallel

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[1] L. Bloomfield, *Language* (New York 1933) 228.

[2] E. Kruisinga, *A Handbook of present-day English.* Part II. Accidence and Syntax 3. Fifth edition (Groningen 1932) 1581.

[3] Ch. Bally, *Linguistique générale et linguistique française,* Second edition (Bern 1944) 94.

[4] MEG Part VI. Morphology (Copenhagen 1942) 8. 12.

[5] A. M. Ball, *Compounding in the English Language* (New York 1939) and *The Compounding and Hyphenation of English Words* (New York 1951).

syntactic group. However much *the Holy Roman Catholic Church* or *the French Revolution* may be semantic or psychological units, they are not morphologically isolated: they are stressed like syntactic groups. *Bláckbìrd* has the morphophonemic stress pattern of a compound, *bláck márket* has not, despite its phrasal meaning; the latter therefore is a syntactic group, morphologically speaking. Stress *is* a criterion here. The same distinction keeps apart the types *strónghòld* and *lóng wàit*, the types *shárpshoòter* and *goód rìder*, the types *búll's-eỳe* and *rázor's édge*, the types *writing-tàble* and *fólding doór*.

2. 1. 11.   On the other hand, there are many combinations with double stress which are undoubtedly compounds. Most combinations with participles as second-words belong here: *eásy-góing, hígh-bórn, mán-máde*. We have already pointed out their synthetic character. Being determined by first-words which syntactically could not be their modifiers, they must be considered compounds. The type *grass-green* has two heavy stresses, but again the criterion is that an adjective cannot syntactically be modified by a preceding substantive (the corresponding syntactic construction would be *green as grass*). The adjectival type *icy-cold* is isolated in that syntactically the modifier of an adjective can only be an adverb. The corresponding coordinative type *German-Russian (war)* is likewise morphologically distinct. The corresponding syntactic construction would be typified by *long, grey (beard)*, with a pause between *long* and *grey*, whereas the combination *German-Russian* is marked by the absence of such a pause.

Factors conducive to compounds

2. 1. 12.   The most important type in which stress is morpho-phonemic is *rainbow*. As it has been the object of much discussion, it will here be given a somewhat detailed treatment. English has at all periods known and made use of this Germanic type of word-formation. The possibility of combining substantives is today as strong as ever. On the other hand, English has, for at least three centuries, been developing the syntactic group of the type *stone wall*[1] which has two stresses. While the coining of forestressed compounds continues, a new syntactic type has arisen which challenges the privileged position of the type *rainbow*. Though the co-existence of two types of substantive—substantive combinations has long been recognized, the conditions under which a combination enters the compound type *rainbòw* or the syntactic group type *stóne wáll* do not seem to have been studied. Sweet, in his chapter on the stressing of compounds[2], has a few remarks on the subject, but otherwise the problem has not received attention. The following, therefore, can be an attempt only.

2. 1. 13.   The most important factor is the underlying concept. Some concepts are invariably tied up with forestress pattern. The concept may be grammatical: when the verb/object or subject/verb relation is present, the combination receives forestress. Therefore the following are types of stable

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[1] O. Jespersen, MEG I. 5. 33—37 and II. 13.
[2] H. Sweet, *A New English Grammar* (Oxford 1892) 889—932.

compounds: h o u s e h o l d e r (*skyscraper, doorkeeper, caretaker*), h o u s e k e e p i n g (*sightseeing, mindreading, childbearing*), r a t t l e s n a k e (*popcorn, sobsister, crybaby*). The first-word is the object in the verbal nexus substantives *householder* and *housekeeping*. Combinations in which the underlying concept is the same though the formal type be different follow the pattern: *geography teacher, art critic, car thief,* related constructions such as *tea merchant, cloth dealer, leather worker, steel production, traffic control, money restrictions, fur sale, grain storage.* If the second-element has acquired the status of an independent word, the predicate/object nexus may have come to be blurred, as in *párty leáder, fúneral diréctor* which are stressed as syntactic groups. Again, a combination may step out of line, either because the verbal nexus is blurred or because the combination is too long: *cóntract violátions, búsiness administrátion, cóncert perfórmance* always have two stresses.

2. 1. 14.　As a rule, combinations in which a verbal nexus is expressed have forestress. Most combinations with a verbal stem therefore are compounds: *showroom, payday, dance floor, playboy, sweatshop.* But in cases where the verbal stem is used in adjunctal function, i.e. has become a quasi-adjective, equivalent to a second participle, a situation similar to that in *stone wall* has arisen: the two constituents receive full stress. We say *roást beéf, roást mútton* etc., and *wáste páper, wáste lánd* are often heard though many speakers always give to these combinations the compound stress. The case is the same with combinations whose first constituents are *-ing* forms of a verb. Most combinations of the type *writing-table* are compounds because the underlying concept is that of destination (*looking-glass, frying-pan* etc.). But when the verbal *-ing* is apprehended as an adjunct, i.e. a participle, the combination is susceptible of being treated as a syntactic group: *Flýing Dútchman, flýing saúcers, revólving doór.* However, other combinations have forestress owing to the idea of implicit contrast: *humming-bird,* with the frequent constituent *bird,* receives forestress to distinguish it from *blackbird, bluebird, mocking-bird.*

2. 1. 15.　Other relations are of a purely semantic nature. The following cases involve forestress pattern. The underlying concept is that of purpose, destination: *theater ticket, freight train, bread basket, paper clip, reception room, concert hall, windshield, toothbrush.*

The significate of the second-word is naturally dependent on that of the first-word: *windmill, watermill, water clock, motorcar, motorboat, steam engine, mule cart, sea bird, water rat, lap dog.*

The first-word denotes the originator of what is expressed by the second-word: *rainwater, rainbow, bloodstain, birth right, pipe smoke, smoke screen.*

The underlying concept is that of resemblance: *blockhead, bellflower, goldfish, horse-fish, iron-weed, silkweed, wiregrass.*

2. 1. 16.　There are other, quite external factors conducive to forestress. The frequent occurrence of a word as second constituent is apt to give compound character to combinations with such words. The most frequent word is probably *man* (the reduction of the vowel and the loss of stress of *man* as a second-word is another result of the same phenomenon): *policeman, congressman, gunman, postman, milkman.* A few other words which are frequent as second consti-

tuents of compounds are *ware* (*houseware, hardware, silverware*), *work* (*woodwork, network, wirework*), *shop* (*giftshop, candyshop, hatshop*), *store* (*bookstore, drugstore, foodstore*), *fish* (*bluefish, goldfish, jellyfish*). The forestress of such combinations is thus due to implicit contrast: each *-man, -shop, -store* word is automatically stressed on the first member to distinguish the combination from others of the same series. The case of *-girl* combinations is particularly interesting in this connection. Appositional combinations are usually syntactic groups with two stresses in English (*boy king, woman writer, gentleman-farmer*), but *servant girl, slave girl, peasant girl, gipsy girl* have contrastive forestress.

Syntactic groups

2.1.17.   The criterion of the underlying concept may now be applied to the syntactic group type *stóne wáll*. The grammatical concept which involves syntactic stressing is that of adjunct/primary. Most coordinative combinations, additive as in *king-emperor, secretary-stenographer*, or appositional as in *gentleman-farmer, prince consort* have two heavy stresses. Here belong combinations with sex- or age-denoting first constituents as *man, woman, boy, girl, baby, embryo* except that, owing to contrast, *boy friend, girl friend, manservant, maidservant* have developed forestress. (It is perhaps interesting to point out that the sex-denoting pronouns *he, she*, as in *he-goat, she-dog*, form forestressed compounds, despite Sweet 904.) Combinations with first constituents denoting relational position, as *top, bottom, average, brother, sister, fellow* likewise have the basic stress pattern of the syntactic group under discussion.

2.1.18.   Combinations with a first member denoting material are treated as adjunct/primary groups and receive two stresses: *gold watch, silver chain, steel door, iron curtain, cotton dress, silk stocking, leather glove, straw hat, paper bag* a.o.

2.1.19.   Incidentally, the treatment of adjunct/primary combinations consisting of two substantives has a parallel in Turkish. Determinative substantive + substantive combinations all receive the determinative group suffix whereas coordinative combinations made up of two substantives do not. Turkish morphologically opposes *kadın terzi-si* (*kadın* 'woman', *terzi* 'tailor, dressmaker', *-si* = the determinative group suffix) 'women's tailor' to *kadın terzi* '(woman) dressmaker'. Coordinative groups in both languages are treated like syntactic groups of adjective + substantive.

Some borderline and other cases

2.1.20.   Often two contradictory principles are at work; then one has to give way. Though material-denoting first constituents usually make a combination into a syntactic group, a frequently used second-word may obviate the result, as in *tinware, ironware, silverware*, or contrastive stress may interfere with the normal two-stress pattern of coordinative combinations, as in *fighter-bomber, girl friend, boy friend*.

2.1.21.   When a substantive can also be interpreted as adjective, changed analysis may lead to change in the stress pattern. Though a hospital can be neither mental nor animal, we stress *méntal hóspital, ánimal hóspital*, as

against *sick roòm, poór hoùse*. Similar shifts occur also in a more fully inflected language such as German: *ein deutsches Wörterbuch, ein lateinisches Heft, die französische Stunde.*

2. 1. 22. Many forestressed compounds denote an intimate, permanent relationship between the two significates to the extent that the compound is no longer to be understood as the sum of the constituent elements. A summerhouse, for instance, is not merely a house inhabited in summer, but a house of a particular style and construction which make it suitable for the warm season only. Two-stressed combinations of the type *stóne wáll* never have this character. A syntactic group is always analysable as the additive sum of its elements. It is an informal, non-committal meeting, never a union of the constituents. This is a great advantage English enjoys, for instance, over German. German cannot express morphologically the opposition permanent, intimate relationship ~ occasional, external connection instanced by *summerhoùse ~ súmmer résidence, Christmas treè ~ Christmas tráffic*. English, therefore, has acquired a substantive + substantive combination of a looser, casual kind for groups in which an intimate, permanent relationship between the significates is not meant to be expressed: *field artillery, world war, country gentleman, village constable, parish priest, city court, state police, home town, district attorney* and countless other combinations.

2. 1. 23. On the one hand, the possibilities of coining compounds are much more restricted than in German where any occasional combination of two substantives automatically becomes a onestressed compound (see 2. 1. 26). On the other hand, English compounds are much closer morphologic units which cannot be split up the way German compounds are. In German, it is possible to say, for instance, *hand- und elektrische Modelle* (Weltwoche, Sept. 26, 1947), clipping the *rainbow* type compound and leaving the adjective/substantive syntactic group intact. However, in English as well as in German, serial combinations like *house and shopowners, wind- and watermills* occur (Bloomfield, Language, p. 232 restricts them to German).

2. 1. 24. It is nevertheless often difficult to tell why in one case the language has created a compound while in another it has coined a syntactic group. Conceptually, *cóllege présidentt* is in about the same position as *ópera dirèctor*, but the first combination is a syntactic group, the second a compound. Form is one thing, concept is another. On the other hand, the same morphologic pattern does not involve the same degree of semantic unity: *lipstìck* is a closer unit than *recéption roòm*. The morphologic criterion of a compound enables us to do justice to both form and concept.

Compounding and stress

2. 1. 25. A few words are required about the problem of stress with regard to compounding. With Stanley S. Newman[1] we accept three degrees of phonemic stress: heavy stress (marked ´), middle stress (marked ‵), and weak stress

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[1] Stanley S. Newman. On the Stress System of English, *Word* 2. 171—187 (1946).

(which is traditionally and perhaps more appropriately called absence of stress). As a combination of two independent words, basically speaking, a compound combines two elements which are characterized by presence of stress. Absence of stress in general indicates grammaticalization of a morphemic element (as in *políce-man*, *Mac Dónald*, *Fitz-gérald*). The determinant has the heavy, the determinatum the middle stress. Thus the usual pattern is ´ ` (e.g. *raínbòw*) which is also followed by combinations with a zero determinatum (*píckpòcket*). All substantival compounds show this pattern, with the exception of those whose first element is the pronouns *all* or *self*. Such compounds have double stress (e.g. *áll-soúl*, *áll-creátor*, *sélf-respéct*, *sélf-seéker*). Of adjectival compounds, only two types have the stable stress pattern heavy stress/middle stress: the type *cólor-blìnd* (i.e. adjs determined by a preceding substantive, unless the underlying concept is that of emphatic comparison, as in *gráss-greén*, where double stress is the rule) and *heárt-breàking*. All other adjectival types are basically double stressed.

2.1.26. Bloch-Trager[1] posit four degrees of phonemic stress: loud stress, reduced loud stress, medial stress, and weak stress. They find reduced loud stress on the adjunct of a syntactic adjunct/primary group (*óld mán*) as well as on second-words of forestressed compounds (*bláckbìrd*, *élevator-òperator*) which are obviously not on the same level. The reduced stress on *old* is rhythmically conditioned by the position of *old* before a likewise heavy stressed word to which *old* stands in the subordinate relation of adjunct. This is a syntactic phenomenon of stress reduction. No change of the underlying concept is involved in a shift from reduced to loud stress as no oppositional stress pattern ´´ ∼ `´ exists in the case of adjective/substantive combinations. So *óld mán* is really a free variant of *óld mán*. *Bláckbìrd* is different: we cannot oppose *bláckbìrd* to *bláck bírd* without changing the underlying concept. The stress pattern ´ ` of *bláckbìrd* is morpho-phonemic. The case of *élevator-òperator* is similar. A combination of the type *hoúse-hòlder* (discussed 1.3) implies the stress pattern ´ ` as morpho-phonemically relevant. Though in the particular case of *élevator-òperator* we cannot oppose the heavy/middle stress to a heavy/heavy stress combination, we can conceive of other pairs where change of stress implies change of the underlying concept, as *Frénch teàcher* 'a teacher of French' ∼ *Frénch teácher* 'a teacher who is French' *réd hùnter* 'one who hunts reds' ∼ *réd húnter* 'a hunter who is red', *fát prodùcer* 'one producing fat' ∼ *fát prodúcer* 'a producer who is fat'.

We must therefore assume a relevant degree of stress which distinguishes the phonemic non-heavy stress of *bláckbìrd* and *élevator òperator* from the non-phonemic non-heavy stress of *óld mán*. While we interpret the reduced loud stress as a positional variant of the heavy stress, we must consider the phonemic secondary stress of *bìrd* and *òperator* as a middle stress. On the other hand, the degree of stress on the third syllable of independent *élevàtor* and *óperàtor* is not different from that on *bird* in *bláckbìrd*: in either case we have a full middle stress. When these words become second elements of compounds, the intensity of the full middle stress is lessened and shifted to a light middle stress (which, for the sake of convenience, I will here mark ˘): *élevàtor òperàtor*. This light

[1] B. Bloch-G. L. Trager, *Outline of Linguistic Analysis* (Baltimore 1942) 48.

middle stress is non-phonemic. We interpret it as the rhythmically predictable form assumed by the full middle stress in a position before or after a morpho-phonemic full middle stress. In composition, it occurs chiefly with compounds of type *aircráft-càrrier* on the second-word of the determinant, the full middle stress being morpho-phonemically reserved for the determinatum. This full middle stress on the determinatum is morpho-phonemic as is also manifest in the behavior of German compounds: those having a compound determinant are stressed as in *Ráthaüs-kèller* whereas those with a compound determinatum are stressed as in *Stádt-baùrät* or *Reìchs-innenminister* (the latter is the common pattern rather).

Compounds not dealt with in this book

2. 1. 27.   Compounding occurs in all word classes. There are compound substantives, adjectives, verbs, pronouns, and particles (conjunctions and prepositions). The strongest group is that of substantives. Next come compound adjectives, then verbs. There is a small group of compound pronouns (the pronominal adverbs included), conjunctions and prepositions, which is naturally restricted. As compounding here serves grammatical rather than lexical purposes, we have not dealt with them.

COMPOUND ENDOCENTRIC SUBSTANTIVES[1]

2. 2. 1. Type raínbòw

A sb is determined by the stem form of another sb. The type goes back to OE, and in PE there are a good number of words from the OE period (though some of them are archaic now) as *almsman, bell-house, boxtree, breastbone, bridgeward, deathbed, deathday, doorward* 'doorkeeper', *handbook* (partly), *hazelnut, headache, heartache, malt-house, mill-wheel, pepper-corn, rainbow, raindrop, rainwater*. From the ME period are recorded *alewife, alms-house, armhole, bagpipe, bedchamber, bedclothes, bedside, bedstraw, bedtime, beehive, birthday, bloodhound, horse-litter, schoolmaster, swordfish, water-mill, water-pipe* a.o. Later are *arrow-head, bedfellow, buckskin, horsemill, pothook, ostrich-feather* (15th c.), *apron-string, ashweed, asshead, bread-basket, birthright, guest-chamber, water-rat* a.o. (16th c.), *air-vessel, arrow-root, backplate, bearberry, bearskin, birthnight, brushwood, horsewhip, wolf-dog, water-clock* a.o. (17th c.), *barmaid, arrow-grass, bane-berry, case-knife, house-dog, moon-flower, water-bed, water-closet* a.o. (18th c.), *airship, airway, armor-plate, beam-tree, bean-feast, border-land, cock-eye, rifle-range, mortarboard, pot-pie, traction-engine* a.o. (19th c.), *mothercraft, lipstick, aircraft, frogman, airman, airplane, floodway* a.o. (20th c.). It is needless to say that this is a small collection only, as cbs are formed in practically unlimited number.

2. 2. 2. The most frequent second-word is probably *man* which has been in use from OE times. To the OE period go back *chapman* 'dealing-man', poet. *foeman*, arch. *gleeman, headman*, obs. *herdman, landman*, obs. *lodeman* 'pilot', *seaman, shipman, tithingman, workman*. From ME times are recorded *bell-man* 'town-crier', *bondman, bowman, countryman, footman, galleyman, hackney-man, hangman, horseman, husbandman* 'farmer', *keelman, liegeman, maltman* 'malt-ster', *peterman* 'fisherman', *plowman, shearman* 'one who shears woollen cloth', *slaughterman* 'executioner', *spearman* 'soldier armed with a spear', *timberman, watchman, woodman* (in various senses). From the 15th c. are *ferryman, lockman, oilman*. From the 16th c. are recorded *bagman, billman, boatman, bookman* 'scholar' *clergyman, coalman, coachman, fisherman, glass-man* 'dealer in glass', *harvestman, packman, postman, potman, pressman, schoolman, scytheman, sheepman* 'shepherd', *shopman, silkman, trencherman*; from the 17th c. *brideman, chairman, dartman* 'soldier armed with a dart', *fireman, flag-man, highwayman, liveryman, moorman, nightman, nurseryman, pitman, shoreman, tallyman, tinman* 'tinsmith', *warehouseman*; from the 18th c. *barman* 'one who makes metal bars', *dairyman, dustman, flash-man, rifleman, showman,*

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[1] Nils Bergsten, A Study on Compound Substantives in English. Uppsala diss. 1911. — G. Künzel, Das zusammengesetzte Substantiv und Adjektiv in der englischen Sprache. Leipzig diss. 1911. — C. T. Carr, Nominal Compounds in Germanic. St. Andrews University Publications XLI. London 1939.

signalman, tollman, toyman. The 19th c. was very productive, to it belong *barman* (in the current sense), *batman, cabman, congressman, flyman, gasman, hackman* 'driver of a hack or cab', *hillman, infantryman, lineman, motorman, pass-man, pieman, pikeman, policeman, prizeman, stockman* 'stock-farmer', and many others formed ad hoc.

As a second constituent *-man* usually appears in the reduced form [mən], except in cbs of a more or less occasional character, such as *ambulance man, elevator man, weather man.* The reduced form is, of course, unstressed whereas the form [mæn] has a middle stress.

2. 2. 3.   The plural form as first-word in cpds chiefly occurs when there is no sg form, as in *clothes-brush, -basket, -horse, -line, -pin, -press, savings-bank, goods train.* The plural is, however, very common in syntactic phrases, especially in long official terms, as in *the United Nations assembly* (for illustration see Jesp. II. 7. 2).

2. 2. 4.   As to the notional side of these cpds, the relations in which the two sbs may stand to each other are manifold. Comparison is the basis in *blockhead, bell-flower, goldfish, silverfish, horsefish, iron-weed, silver-seed, silkweed, wiregrass.* The material a thing is made of is expressed in *tinware, ironware* and other *-ware* cbs, *waxwork, network* etc. Purpose relation we have in *gun-powder, keyhole, birdcage, book-case, raincoat, battleship, horsewhip, bread-basket* etc., place relation in cpds such as *water-horse, water-rat, water-nymph, garden-party, headache.* The idea of time underlies cpds such as *eveningsong, nightclub, nightmare, moon-flower.* But it is no use trying to exhaust the pos-sibilities of relationship; many cbs defy an indisputable analysis. It may be that we have instrumental relation in *footstep, handwriting* (Jesp. VI. 8. 22), but it cannot be proved. We will always try to classify, but it should be borne in mind that the category of compounding is not one that fills the need for classification. Whether a *nightshirt* is 'a shirt for the night' or 'a shirt worn at night' is quite unimportant. In forming cpds we are not guided by logic but by associations. We see or want to establish a connection between two ideas, choosing the shortest possible way. What the relation exactly is, very often appears from the context only. *Airmail* is 'mail carried through the air', a *gasmask* is 'a mask used for protection against gas', an *airport* 'a port for air-planes'. Shortness takes priority over clearness. Words are different in dif-ferent situations: a *finger bowl* is 'a bowl for the fingers', a *fingernail* is 'a nail of the finger', a *finger post* 'a guide post bearing a finger index', a *fingerprint* 'a print, an impression made by the fingers', *finger waves* are 'waves produced by the help of the fingers'. Thus we have five different relations with one and the same first-word. One and the same cb even may signify several things and accordingly have several notional bases: a *water-bed* may be 'a stratum through which water percolates' or 'a bed prepared on a water mattress'. Theoretically, several others are possible, though not actually in existence. Cpds with *man* for a second word naturally denote 'a man connected with ...' (usually by professional occupation).

2. 2. 5.   One relation is usually avoided, namely that underlying the type *pathway.* The second-word is the genus proximum while the first-word is the

differentia specifica. As a rule, such cbs are avoided in educated speech, as there is something tautological about them. Common are cbs with *tree* for a second-word, as *oak-tree, palm-tree, plane-tree*, perh. on the analogy of *apple-tree* where the notional basis is different. *Roadway* 1600 was perhaps coined as the counterpart of *pathway* a 1536, the former being the small, the latter being the riding (= road)-way. *Pebble-stone* c 1000 is the original while *pebble* c 1290 is a clipping of it. *Pussycat* 1837 and older *puss cat* 1565 may belong here (*puss* 'cat' a 1530), if the cb is not rather a cpd of the *tomcat* type, *puss* understood as a jocular proper name. A translation cpd is *court-yard*. OE cbs such as *gang-weg* 'way', *mægen-cræft* 'strength', *holt-wudu* 'wood, forest' *word-cwide* 'speech' are poetical forms and certainly not mere tautologies. A sentence like *hie mægenes cræft minne cūðon* (Beo. 418) would not otherwise be possible. In uneducated speech, cbs of the type are much more frequent. A few instances are *trout-fish, tumbler-glass, viper-snake, wench-woman, yacht boat, cur dog, engineerman, witch woman, widow woman* (found with many more in Harold Wentworth, ADD s.v. *redundancy*). A full list of tautological compounds in OE alliterative poetry is given by Carr 334—337.

2. 2. 6. Outside the regular stress pattern is *mankind* in the sense 'the human species' while it is forestressed in sense 'men', as distinguished from 'women'. In England, the cb *head-master* also usually has end stress whereas it has the double stress of a syntactic group in American English. The word *mankind* (1300) was formerly always forestressed. It must then have acquired the group character and stress type of *stone wall* to shift to end stress. It is also worthy of note that right from the start there existed both *mankind* and *man's kind* (both cbs in Cursor Mundi for the first time) which leads us to suppose that *mankind* was apprehended as a syntactic group, too, so the subsequent shift to syntactic group stress was quite normal.

2. 3. 1. Types fíghter-bòmber / sláve gìrl

Two sbs may form a group of notionally coordinated members, either as an additive group, like *fighter-bomber* 'a plane which is both fighter and bomber', or as an appositional group, like *slave girl* 'a girl who is a slave'. The number of cpds of this type is small in English, as the tendency is to treat cbs based on a coordinative relation as syntactic groups. Therefore, many cbs of the coordinative type are mere adjunctal cbs of an ad hoc character, to be treated in syntax, while others, which represent close semantic units, are dealt with in the chapter "Phrases".

2. 3. 2. Miss Hatcher (see 2. 23. 3—6) seems to me to overstress the influence of Neo-Latin. That the Latin-coined cbs go back to NL is evident, but I doubt whether the types *king-emperor* and *fighter-bomber* owe much to Neo-Latin. The comparatively late appearance of most of the cbs does not necessarily go to prove that they were coined in the wake of Neo-Latin compounds. Medieval Latin is certainly responsible for MHG *muotermeit*, E *god-man* 1559. And then, there are early cbs, as *merchant-adventurer* 1496—97, *merchant-leech* 1402, *merchant-tailor* 1504 not to speak of the appositional cbs, such as *knave-child* 1175, *knight-bairn* c 1205, *knave-bairn* 1300, *man-child* 1400, *priest-hermit*

c 1440 which may have played a part in the growth of coordinative con-
structions, all the more as the line between additive and appositional cbs
cannot always be clearly drawn.

I would also like to point to the great number of copulative cpds in OE
poetry (*āgendfrēa* 'lord and owner', *hlēodryhten* 'lord and protector' etc., see
Carr 328—329) of which *werewulf* was probably the only word commonly
used, just to suggest that the pattern did exist in linguistic thought and
perhaps helped to produce the above cbs *knave-child* etc.

2. 3. 3. For reasons pointed out above (2. 1. 17), coordinative forestressed
cpds are not numerous in English. Except for a few combinations, such as
roller-coaster, panty-girdle, fighter-bomber there are no additive examples. Other
cbs belong to the appositional type *slave girl* ' a girl who is a slave', as *servant
girl, peasant girl, washerman, washerwoman* (*bondman, bondwoman, bondmaid*
are historically the same type). The reverse type with sex-denoting first-words
we have in *boy friend, girl friend, man-child, manservant, maidservant*. Accord-
ing to Carr (327) the latter type was the regular one in OE.

2. 3. 4. Scholars are not agreed upon the question of appositional compounds.
Kluge calls appositional compounds the additive type *Gottmensch* as well as
the type *Eichbaum* (§ 93; for our type *pathway* which I consider to be a sub-
ordinative type, see below). Mätzner's treatment of appositional compounds
(I. 523—24) is similar to Kluge's. Wilmanns (I. 399. 2) follows Mätzner and
Kluge. Both Mätzner and Wilmanns interpret combinations based on a re-
lationship of comparison, such as *blockhead* and *goldfish* (Mätzner), *Goldkäfer,
Laubfrosch, Staubregen* (Wilmanns) as appositional compounds. Koziol's
classification (§§ 88—92) is the same as Mätzner's. There is an article by Anna
Granville-Hatcher, Modern Appositional Compounds (American Speech 27
(1952) 3—15). Miss Hatcher notes the increasing frequency of appositional
combinations, chiefly of inanimate reference which, however, "is largely a
phenomenon of journalistic literature". The paper is remarkable for its wealth
of documentation. In the interpretation of the term 'appositional compound',
however, she is in line with the above grammarians. Like them, she includes
among appositional compounds combinations based on the relationship of
comparison, as *figwort, ironweed, toothpick legs*. Her two principal types,
pumice stone and *fuel oil* comprise many relevant examples, but many more
are non-relevant. Besides undoubtedly appositional groups such as *toy tank,
poison gas, gift book* and others, we find numerous combinations which are not
appositional. Most of the combinations of her type *pumice stone* are sub-
ordinative groups, as *teaching profession, marriage relationship, murder charge,
cash basis, gold standard*.

Only when we analyse a combination as 'a tank which is a toy' do we have
an appositional type. The analysis of *silverfish* as 'a fish which is silver' is
unnatural. In a language such as Turkish, which distinguishes the two types
of compounds (subordinative and coordinative compounds) morphologically,
silver bracelet (a bracelet which is silver materially) would be appositional
(*gümüş bilezik*) whereas *silverfish* (a fish which is silver, figuratively speaking)
would be subordinative (*gümüş balığ-ı, -ı* being the mark of subordination).
Similar considerations apply to species/genus combinations. It seems pre-

posterous to interpret *oak tree* as 'a tree which is an oak', or *marriage relationship* as 'a relationship which is marriage', and Turkish, accordingly, treats such combinations as subordinative compounds. The second-word denotes the wider frame to which the first-word is subordinated. Jespersen's treatment (VI. 8. 5), on the whole, distinguishes the types clearly. In a few cases, I disagree with his analyses. The type *the Browning family* is a subordinative combination, comparable to the *teaching profession* which we have discussed above. *Boa constrictor* is a Latin, not an English appositional group.

2. 4.   Types áll-soúl / sélf-rúle

There are also cbs with the pronoun *all-* or *self* for first word. *All-* cbs are literary and only used in a religious context, denoting attributes of the deity, as all-soul, *all-parent, all-power, all-wisdom* a.o.

Cbs with *self-* are otherwise restricted. They are chiefly literary or scientific, used only with verbal nexus sbs in which *self* is the object, as self-rule, *self-analysis, self-contempt, self-dislike*. Numerous other cbs have existence in dictionaries only.

Both *all-* and *self-* cbs have double stress.

2. 5. 1.   Types cráftsman / búll's-eỳe

Historically speaking, the types are old genitive groups, though, in many cases, the plural concept has also entered this type. It will be impossible to tell, when exactly *s* came to be regarded as a derivative element and when combinations of this group acquired compound status. The first type-word is representative of the largest group of cpds, namely those with *man* for a second-word, the second-type word is characteristic of the second largest group, i.e. cbs with the name of an animal for a first-word. I shall first give examples for the type craftsman.

2. 5. 2.   From the OE period are recorded *landsman, steersman, townsman*, from the ME period are *craftsman, doomsman* 'judge', *kinsman (kinswoman)*, from the 15th c. is recorded *daysman* 'arbitrator'. Since the 16th c. cbs have been coined more freely. In the 16th c. we find *banksman* 'overlooker at a coal mine', obs. *copesman* and *copesmate* 'tradesman', *deathsman* 'executioner', *gownsman, handicraftsman, huntsman, salesman, spokesman, tradesman*. From the 17th c. are recorded *draftsman* (various senses), *groomsman* 'bestman', *helmsman* 'steersman', *herdsman, kingsman* 'royalist', *sidesman, swordsman, tidesman, woodsman*. From the 18th c. date *batsman, bondsman, dalesman, gangsman, groundsman, locksman* 'jailor', *raftsman, roundsman, sightsman, sportsman, strokesman (tradesfolk, tradespeople, tradeswoman), tribesman*. From the 19th c. are recorded *bailsman, bandsman, brakesman, bridesman (bridesmaid), clansman, cracksman* 'housebreaker', *cragsman, dragsman, frontiersman, guardsman, guildsman, leadsman, locksman* 'lock-keeper', *mobsman, oarsman, plainsman, pointsman, thirdsman, topsman* 'hangman', *yardsman (yardswoman)*.

2. 5. 3.   What distinguishes the two *-man* types, *policeman* (12. 2) and *craftsman*? Whenever we want to express the idea 'man connected with . . .' the

usual result is the former type. All ad hoc cbs are formed in this way, as *ticket man, elevator man, ambulance man*. The *craftsman* type is much more restricted. Its limitations may be described as follows. 1) The basis is a plural so we actually have the *policeman* type, as in *backwoodsman, woodsman, plainsman, dalesman, roundsman, salesman, seedsman, cragsman, cracksman, pointsman, locksman* 'lock-keeper', *brakesman* BE, *oarsman, honorsman* (university term). At the same time, however, many words are connected with special semantic groups.

2) Many fall under the semantic denominator 'appurtenance to a group or solidarity circle', as *landsman, townsman* (OE), *kinsman* (ME), *woodsman* (17th c.), *tribesman, dalesman, gangsman* (18th c.), *bandsman, clansman, frontiersman, guardsman, guildsman, mobsman* (19th c.).

3) Another group denotes persons connected with occupations in which skill or craftsmanship is involved, as *steersman* (OE), *craftsman* (ME), *handicraftsman, statesman* (16th c.), *helmsman, swordsman, woodsman* (17th c.), *raftsman, batsman* BE, *sportsman* (18th c.), *cracksman* sl, *cragsman, oarsman* (19th c.). Almost all terms connected with sports follow the type, as *fieldsman, linesman*.

4) A few words are outside these principal groups. *Bondsman* 'surety' and *bailsman* 'one who gives bail' are law terms. The concept of 'appurtenance', i.e. the genitive idea, underlies *groomsman* which attracted *bridesman* and *bridesmaid*. Some words, rather technical terms, denote various kinds of laborers, as *sidesman* (Mining term), *leadsman* (Nautical term), *dragsman* 'man who works with a drag', *pointsman* (also a Mining term). Now obs. *copesman* 'dealer' (ME) attracted *salesman, tradesman, seedsman* (16th c.). Cases of overlapping are AE *brakeman/brakesman* BE, *yardman/yardsman*, dial. *brideman/bridesman*. A *batman* is a man in charge of a bat-horse, *batsman* is the man who handles the bat at cricket.

2.5.4.   Examples of the type b u l l ' s - e y e are *cat's cradle, cockscomb, cat's-eye* (kind of gem), *cat's paw* 'light air at sea', *beeswax, beeswing, ratsbane, dog's ear, duck's bill* (a surgical instrument), *sheep's eye* 'amorous glance', *crowsfeet*.

There is a very great number of plant names of the type, as *adder's-grass, adder's-tongue, bear's foot, buck's horn, calf's foot, cat's foot, cock's foot, colt's tail, cranesbill, goat's beard, hares-earnhares-foot, hartshorn, hart's-tongue, hen's foot, hawk's bill, hog's fennel, hound's tongue, lamb's tongue, stork's bill, wolf's bane*. The examples given here represent a small group only of the plant names in existence. Many of them are OE.

Cpds which have neither *man* as a second-word nor the name of an animal as a first-word are rarer. Instances are *doomsday, death's head*, the plant names *devil's bit, devil's-milk* (and many other *devil's-*cbs), *dragon's blood* (and other *dragon's-* cbs), *lady's cushion, lady's finger* (and many other *lady's* cbs), *monk's hood, pope's head*.

2.5.5.   Surnames in *-son* are of the same type, the *s* of the first-word having been dropped. Examples are *Nelson, Wilson, Robinson, Robertson, Richardson* etc.

Historically speaking, there were other genitive endings in OE (*-a, -ra, -ena* etc.), and cbs with such genitives resulted in words like *Sunday* fr. *Sunnandæg, Friday* fr. *Frīgedæg, Monday* fr. *Mōnandæg, Oxford* fr. *Oxenaford, Buckingham* fr. *Buccingahām* etc.

2.6.1. Types wríting-tàble / dáncing-gìrl

Cbs of vs plus a common sb existed in OE (*stemping-īsen* 'stamping-iron', *eardung-hūs* 'dwelling-house', *eardung-stōw* 'dwelling-place'), but none of the PE cbs is older than ME. The meaning of the cbs is chiefly that of '(table) used for (writ)ing'. Exs are *burning-glass, looking-glass, magnifying-glass, reducing-glass, burying-place, dwelling-place, landing-place, burying-ground, playing-ground, carving-knife, scalping-knife, dressing-case, dressing-gown, frying-pan, kneading-trough, laughing-stock, moulding-board, sealing-wax, sounding-lead, sounding-line, spending-money, spinning-house, spinning-wheel, driving-wheel, stumbling-block, walking-stick, living-room, dining-room.*

Based on other notional relations are *sweating-sickness, dancing-master, dawring lesson.*

2.6.2. Type dáncing-girl.

The first-word is the preadjunct (attribute). Instances are *walking-leaf, humming-bird, mocking-bird, servingman, serving-woman, quaking-grass, standing-stone* 'menhir'.

2.7.1. Types whétstòne / ráttlesnàke

The morphological type 'vb stem determining sb' is not old. There are no formations in Primitive Germanic, and it is doubtful whether the type existed in Primitive West Germanic (see now Carr 175—196). It was certainly weak in OE, much weaker than the type *writing-table*. For OE exs which are extinct in PE see Carr 189—193. The chief relation is that of purpose, the cb meaning '(stone) to perform the action of the vb'. Examples are *whetstone* OE, *grindstone, drawwell, rubstone* 'kind of whetstone', *shake-fork* (now dial.). Later are *blow-hole* (of a whale), *blow-pipe, drag-hook, draw-gate, dripstone* 'cornice' etc., *driveway, go-cart, hurl-bat, hush-money, peep-hole, pitch-fork, runway, searchlight, slip-way, spring-board, spy-hole, stopcock, stop-watch, swagger-cane, swagger-stick, swear-word, swim-bladder, wash-house, washcloth, plaything, slapstick,* technical terms such as *drawbar, drawbore, drawknife, drawplate, drawtube, drykiln.* The idea of passive action underlies *showbread* 'bread to be shown', *drawbridge, treadmill, treadwheel, throwstick.*

2.7.2. Type ráttlesnàke.

The first-word would be the predicate in a sentence, the sense of the cpd being 'snake which rattles'. There are no OE examples. ME are *goggle-eye, leap-year* (the year 'leaps' insofar as any fixed festival after February skips a day and falls on the next week-day but one to that on which it fell in the preceding year, see OED). Later are *cry-baby, cut-grass, cutworm, draw-boy* (weaving term), *drift-wood, leap-frog, numb-fish* (not 'f. *numb* adj.' OED), *pass-key, pop-corn* AE, *pop-gun, roll-top* 'sliding cover of desk', *screech-owl, scritch-owl, shear-grass* (because of its sharpness), *sob-sister, spring-hare, spring-beetle, sway-beam, sway-brace, swish-cane, touchline* in obs. sense 'tangent'.

In some cbs we have different notional bases from the ones discussed. The first-word corresponds to a passive vb in a sentence: *mincemeat* 'minced meat'. Other instances are *lock-jaw* 'kind of tetanus', *pickle-herring*, obs. *prick-song* 'music sung from pricked, i.e. dotted notes', *snub-nose*, *skim-milk*. Some have earlier by-forms with second participles as first-words, as *locked jaw, minced meat, pricked song, pickled herring*, but *skimmed milk* 1623 is quoted later than *skim-milk* 1596.

In cbs like *touch-paper, touchwood,* obs. *touch-powder* etc. where *touch-* implies the idea 'ignition at the mere touch or contact' the first-word may be the deverbal sb, as also in *pay-day, payroll, workday, washday, dance floor, hitsong, whirl-pool,* a.o.

For cbs of the t. *scatterbrain* see 'Bahuvrihi compounds'.

Note. I cannot agree with Jespersen's analysis of *drawbridge, show-bread, throwstick, treadmill, treadwheel* for which he says that "the sb is the object" (VI. 9. 3). The only type to which this analysis applies is the type 'pickpocket' to which they do not belong. "The sb is the instrument by means of which the action is carried out" in *bakehouse, washbasin, wash-house, washstand* according to Jespersen, which is obviously not correct.

2. 8. 1.   Types bláckbìrd / blácksmìth / Nèw Éngland / nòrth-eást

The type is OE. To the oldest layer belong *blackberry, freeman, holiday*, quicksilver, sweetmeat, twelfthday, twelfthnight, wildfire, wildfowl*. The type has been common in all periods of the language. Later exs are *allspice, busybody, broadcloth, blackberry, blackboard, blue-book, blue-bird, broad-axe, flatboat, freemason, freshman, goodman, goodwife, grandfather* (and other *grand-* cbs), *highroad, highway, highschool, hotbed, hothouse, livestock, longboat, longhand, madman, merryman, nobleman, noblewoman, plainsong, quicklime, quicksand, shortbread, shortcake, shorthand, small-beer* (in U.S. also *near-beer*), *small-arms, small-clothes* 'breeches', *smallpox, strongbox, supple-jack* 'shrub' etc., *sweetbread, sweetheart, tallboy, true-love, whiteboy* 'darling boy', *whitefish* and countless other words.

To the same type belong cbs of the now dead type **Englishman**, as *Irishman, Scotchman, Cornishman, Kentishman, Frenchman.*

We have the type in surnames and place-names: *Newburgh, Newcastle, Newport, Freeport, Freetown, Goodyear, Goodfellow, Longfellow* etc. See also 'Bahuvrihi-cpds'.

A second participle for a first-word we have in *freedman, friedcake, cutwork, drawn-work* 'ornamental textile work', *passed-master* 'qualified master' (= past-master).

Cpds with comparatives or superlatives do not exist in the Germanic languages (see Carr 204). The type *freedman* did exist in OE, but only in poetry it seems. Carr has five examples, while the type is much more in use for bahuvrihi adjs. *toren-ēage* 'blear-eyed' etc. (Carr 201—203).

2. 8. 2.   The type **blacksmith** is modern. It differs from *blackbird* in that the first-word is not the adjunct, but the subjunct of the second-word. Exs are *greengrocer, greenhouse, mad-doctor, madhouse, poorhouse* = *poorshouse, poorbox, poor-law, poor-rate, sick-bed, sick-room, sick-list, sick-nurse, dry-nurse,*

wet-nurse, whitesmith, tipsy-cake, quit-rent 'rent paid by a freeholder to be quit of certain services', *condemned cell, wanted list, missing list.*

2. 8. 3.   There are many place names of the type N e w E n g l a n d with a place name for a second-word and *new* for a first-word, as *New Albany, New Bedford, New Haven, New Hampshire, New London, New Windsor, New York* and many others. These cbs usually have the main stress on the second element, as parallel German cbs of the type *Neubrandenburg* do. Cbs with a non-place name second-word are stressed on the *new*, as *Newport, Newchurch, Newcastle* (see 2. 7. 1).

2. 8. 4.   End-stressed is also the type n o r t h - e a s t, *northwest, southeast, southwest.* Semantically, these cbs are not in a line with other cbs though they show some affinity to coordinative cbs. The cpd denotes the arithmetical means between the first-word and the second-word concept.

High-lows 'laced boots reaching over the ankle' (= between high and low) has the same notional basis, but is fore-stressed.

2. 9.   Types hé-goàt / shé-dòg

From about 1300 we have sex-denoting cpds with *he* and *she*, originally only as words for animals. The earliest instances of this use are *he-lamb* 1300, *she-ass, she-sheep* 1382, *she-ape* (Ch.). Later are recorded *she-dog, she-lion, she-panther, she-pig, she-dragon, she-bear* / *he-swan, he-goat.*

Since the 16th c., the pronouns have also been prefixed to words denoting persons, as in *he-lover, he-friend, he-cousin, he-pensioner.* Sex-denoting *he-*cbs are pejorative now. Cbs with *she* are more frequent: *she-lover, she-friend, she-cousin, she-pensioner, she-thief, she-witch, she-saint, she-devil, she-baker, she-page, she-favorite, she-Greek, she-preacher* etc. The somewhat contemptuous nuance in *she-* cbs is quite recent and is not necessarily implied. The OED has neutral uses from the 19th c. such as *she-cousin, she-relative, she-saint* (*she-saint* in Aldous Huxley, Those Barren Leaves 303 does not seem to have any pejorative note either). But *she-poetry* is certainly not complimentary.

He- cbs, which have always been rarer, now seem to be American usage only. Exs are *he-fellow* 1829, *he-man* 1832, *he-male* 1909, *he-drinker* rec., words which stress the 'male' quality of a person. Pejoratively sex-denoting are such cbs as *he-frump, he-whore.*

The type has occasionally been used for names of plants and trees, especially in Australian English. In *she-oak, she-beech* the first-word implies inferiority of timber. The only *he-* cb seems to be *he-oak,* an Australian tree. Dialectal is *he-huckleberry* 'h. twice the ordinary size' (ADD).

2. 10.   Type hoúse-keèping[1]

Cpds are chiefly based on a 'predicate/object' relation, but as such cbs are, on principle, nominalized sentences, other relations also occur. The type occurs in O E with cbs such as *gōdspellbodung* 'preaching of the gospel', *āþ swaring* 'oath-swearing', *crism-lȳsing* 'the taking away of the chrismale' a.o., but the

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[1] For the analysis of this type see 2. 1. 3—4.

PE cbs are not older than ME. Most of them have been coined in the MoE period. ME are *backbiting* 1175, *housewarming* 1150 (? 'fuel', next inst. 1577), *bloodshedding* and *bloodletting* 1225, *cock-crowing* 1382, *home-coming* 1374, *man-slaying* 1380, *child-bearing* 1388, *leave-taking* 1375, *sun-rising* 13... Later are *earthquaking* obs., *bookmaking, oath-taking, cock-fighting, sunsetting, law-giving* (15th c.), *thanksgiving, thank-offering, house-keeping, peace-offering, seafaring, wool-gathering, book-selling, oathmaking, oathbreaking, bone-setting, sun-burning, heartburning, handwriting* (16th c.), *man-killing, book-keeping, well-being, cock-throwing, fly-fishing, foxhunting* (17th c.), *law-breaking, merry-making, picture-writing, bookbinding* (18th c.), *land-leaping, pig-sticking, shore-going, sight-seeing, stocktaking, swan-upping, table-turning, thought-reading, table-rapping, flight-shooting* (19th c.), *night-flying* (20th c.) and many others. The type is practically unlimited.

In most cases the first-word is the object. A subject/predicate relation underlies *earthquaking, cock-crowing, cock-fighting, sunburning, heartburning, sunrising, sunsetting, tongue-lashing*. The first-word would be the subjunct of a sentence in *play-* (etc.) *going, night-flying* 'flying by night', *cock-throwing* 'the sport of throwing sticks at a cock tied to a post', *home-coming, flight-shooting* 'shooting on the wing', *fly-fishing* 'fishing with a fly'. The first-word is the predicate complement in *well-being* and *short-coming*. *Thanksgiving* is the only word of the type that is stressed on the second element (perhaps originating in such combinations as *rejoicing and thanksgiving*, as Robert A. Hall once suggested to me).

2. 11. 1.   Types eárthquàke / strónghòld

The second-words are deverbal sbs. OE had cbs such as *mannslæht* 'man-slaught', *niht-wacu* 'night-wake', *niht-wæcce* 'night-watch', *ellor-siþ* 'the going elsewhere, death', *ād-faru* 'going to the stake', *sunscīn* 'mirror' a.o., also the agent-noun type *man-slaga* 'man-killer' (see 2. 12. 1). OE *heretoga* (= OHG *herizogo*) is not an Ec but a loan from German (which borrowed it from Gothic), ultimately representing OGr *stratēgós*. For a discussion of the various theories advanced see Carr 5—6. With the exception of *grasshop, nightwake, manslaught*, and *nightwatch* the OE cbs appear to have died out by the ME period. The agent-noun type was replaced by formations in *-er*, impersonal deverbal sbs are formed from the 13th c. on (see 5. 6. 4). The OED gives a somewhat strange explanation of the type (s.v. *sunrise* and *sunshine*): 'app. evolved, through syntactical ambiguity, from clauses such as *forto* (= until), *tofore*, or *before the sun rise*, where orig. *forto*, etc. are conjunctions and *rise* a verb in the subjunctive', disregarding the fact of the old wf pattern and the rise of impers. deverbal sbs. From about 1250 are recorded *heartburn* (in form *herte-bren*) and *sunshine* (in form *sunne-sine*). Other coinages from the ME period are *earthquake* c 1340, obs. *earthquave* 1382—1541, *sunrise* 13.., *sunset* 1390, *stronghold* c 1425, *freehold* 1467, *nosebleed* (plant-name) 14... But most PE cbs have been coined during the MoE period, as *bloodshed, daybreak, eyewink, fleabite, footprint, heartbreak, heartquake, day-peep, troth-plight* (16th c.), *footfall, foothold, inkshed, inkstand, landslip, nay-say* 'refusal', *woodcut, deadfall* (17th c.), *leasehold, horselaugh, moonrise, nightfall, safehold, shoeblack, money-grub,*

small-talk, little-go 'an examination at Cambridge' (18th c.), *eyewash* (orig. 'lotion for the eye'), *handshake, landslide, roll-call, side-slip, washstand, boot-black* (19th c.), *wisecrack* AE 1924, *legpull* 1920.

2. 11. 2.   The majority of cbs denote a specific instance of what the verbal idea implies, as *bloodshed, earthquake, landslide, landslip, sunrise, sunset, nightfall* etc.

A concrete sense underlies *footprint, fingerprint, inkstand, washstand, fleabite, nosebleed* (as a plant-name), *woodcut, deadfall* 'trap', *safehold, stronghold, hairdo, molly-coddle* 'a person who is coddled'.

A few cbs denote the agent, personal in *shoeblack, chimney-sweep* 1845, *boot-black, pip-squeak* 1910 'insignificant person' (obviously 'one who pips and squeaks'), *slowpoke* (not in OED or Spl.), *moneygrub* (18th c.). Cp. also *by-blow* 1595 and obs. *by-slip* 1670 'illegitimate child'. The notion of impersonal agent underlies obs. *nutcrack* 1570, *doorstop, billfold* (both neither in OED nor DAE), *hair-tidy* (Kath. Mansfield, not in OED or Spl.). An obs. name for an animal is *grasshop* 'grasshopper' which is OE.

2. 12. 1.   Types hoúsehòlder / áll-seér / sélf-seéker / shárpshoòter

For the description of this type see 2. 1. 3. The underlying theme is a verbal phrase. The second-word is an agent sb while the first-word is the object or, less frequently, the adverbial complement of the underlying verb. It is a comparatively late extension from the older type *grass-hop* 'grasshopper', the second-word being an OE sb in *-a* or *-e* (*man-slaga* 'man-killer', *gold-gifa* 'gold-giver', *gærs-hoppe* 'grasshopper' etc.). From the 9th c. onwards (see Carr 229), extensions in *-er* begin to occur, as *ārgēotere* 'brass-founder', *word-sāwere* 'rhetorician' and others. With the exception of *blōd-lǣtere* 'bloodletter' none survived into ME.

2. 12. 2.   From the 13th c. is recorded *wire-drawer* (as a surname in 1265), but it is only in the 14th c. that the type becomes strong. Exs are: *man-slayer* c 1300, *purse-bearer* c 1305, *good-doer* 1340, *house-breaker* 1340, *lime-burner* 1329, *soothsayer* 1340. To the end of the 14th c. belong *book-binder, cloth-maker, blood-sucker, house-holder,* obs. *land-leaper* 'vagabond', *law-giver, law-maker, shoe-maker, tale-teller, toll-gatherer, tooth-drawer, water-bearer, wrong-doer.* From the 15th c. are recorded *bed-maker, bone-setter, bricklayer, brickmaker, cup-bearer, ear-picker, gold-beater, grass-hopper, house-keeper, innholder, landholder, law-breaker, money-maker, night-walker, partaker,* orig. *part-taker, peace-maker, soap-maker, standard-bearer, sword-bearer, tale-bearer, water-drinker, way-farer.* To the 16th c. go back *book-keeper, book-seller, bow-bearer, figure-caster, gate-keeper, gold-washer, grave-digger, hen-harrier, horse-breaker, image-breaker, image-maker, life-giver, nut-cracker, pothunter, rat-catcher, ringleader, seafarer, searover, sheep-biter, sheep-shearer, shopkeeper, spider-catcher, stone-cutter, street-walker, swan-upper* 'official who ups swans, i.e. marks them for owner-ship', *thief-raker, time-server* 'opportunist', *torch-bearer.* Later are such cbs as *bog-trotter, bull-baiter, bush-fighter, cabinet-maker, caretaker, daisy-cutter* 'horse that in trotting steps low', *body-lifter, body-snatcher, devil-dodger, diamond-cutter, dress-maker, fire-eater, fly-catcher, game-keeper, giant-killer, glass-cutter,*

goat-sucker, hair-dresser, hair-splitter, hellbender AE 'kind of salamander', *hop-picker, knife-grinder, lamplighter, landowner, matchmaker, money-lender, oyster-catcher, pawnbroker, penholder, pipelayer, place-holder, place-hunter, play-goer, pleasure-seeker, prize-fighter* (orig. 'one who fights a prize'), *razor-grinder, road-maker, rope-dancer, screwdriver, shareholder, shoplifter, skyscraper* (orig. a sail), *sleepwalker, stockholder, spirit-rapper, taxpayer, gate-crasher, toad-eater, watch-maker, wire-puller, woman-hater, wood-cutter, cushion-thumper, tub-thumper* and countless others.

2. 12. 3.   The cbs chiefly denote persons, but there are also many names of animals, as *daisy-cutter, goat-sucker, gold-beater* (species of insects), *grass-hopper, hen-harrier, honey-eater, honey-sucker, leaf-cutter* (insect), *oyster-catcher* (bird), *sheep-biter* (dog), *spider-catcher* (bird), instruments, machines, devices, as *penholder, screwdriver, earpicker, nutcracker, mine-sweeper, mine-thrower, flame-thrower, timekeeper* (orig. a chronometer), *silk-winder* (a machine), *knuckle-duster*.

As already pointed out, the notional relation between the two members is in the majority of cases that of 'predicate/direct object'. The first-word would syntactically be a subjunct in *grass-hopper, night-walker, sleep-walker, rope-dancer, street-walker, church-, movie-, picture-, play-, opera-goer, baby-sitter.*

There are other cbs of seemingly the same make up which must, however, be kept separate: cbs of the t. *bag-piper,* i.e. extensions of cpds (*bagpipe -er*).

2. 12. 4.   The types **áll-séer** and **sélf-séeker** are different from *householder* in that the first-word is a pronoun. Only *all* and *self* occur. The notional relation is one of 'predicate/object'. Both types are literary and have been in use since about 1600. The corresponding OE types *æl-wealda* 'all-wielder = God' and *self-cwala* 'self-killer' did not survive into ME.

Instances are *all-creator, -destroyer, -encompasser, -giver, -maker* etc (see OED); *self-advertiser, -deluder, -destroyer, -killer.*

With *self-* there is also another type of cpds which is based on the notional relation 'subject/predicate', illustrated by the cb *self-starter.* This use is not older than the 19th c., and cbs all denote technical devices, *self-* acquiring the meaning 'automatic'. Cbs of this type are not very numerous, as it seems. Exs are *self-actor, -binder, -cocker, -feeder, -holder, -stripper* (q. OED *self* 'prefix' 4). All these cbs have double stress.

2. 12. 5.   Type **sharpshooter.** An agent sb is determined by an adj used as subjunct. The underlying base is again a verbal phrase as with *householder.* In OE we have similar types, now extinct, illustrated by such words as *æfter-genga* and *ān-genga* which did not survive into ME. Cbs of the *sharpshooter* type are MoE (with the exception of *freeholder* 1425 which is not analysable in the same way as *sharpshooter,* being a translation loan of AF *franc tenaunt*). The type is weak. Exs are: *new-comer* 1592, *high-binder* 'a rough' A sl 1806, *high-blower* 'a roarer' 1831, *sharpshooter* 1802, *high-stepper* 'horse which lifts its feet high' 1860, *shortcomer* 1865. *Smallholder* 1915 is formed after *freeholder.*

2. 12. 6.   There are cbs with adjectival first-words in which the notional relation is that of 'predicate/object', i.e. the adjs are used as primaries (parallel to *householder*).

Instances are *good-doer* 'benefactor' 1340 (now superseded by a doer of good), *evil-doer* 1398, well-willer 1448, *well-doer* 1450 (both are rare now), obs. *evil-willer* 1460, *ill-willer* c 1500, *well-wisher* 1590, *ill-wisher* 1607, *well-deserver* 1617, *well-meaner* 1654, *best-wisher* 1876 (after *well-wisher*).

Though dictionaries (OED, Webster) give double stress, a stable pattern does not really exist as the preceding words are not common. The only ones more or less used are *well-wisher* and *evil-doer*, and as often as not they are heard with forestress. The equivalent in America for *well-doer* is the recent *dò-goóder* which is derived from the phrase *do good*.

2.13.1. Types Jáck-stráw, tómfoól ('first name—surname' compounds)

These cbs are not all the same type, they represent two heterogeneous groups. The type *jack straw*, as a real first-name plus surname cb is probably best analysed as containing the determinatum in the first element, *jack* used as a generalized proper name which has become a common sb. The determinant is given by the second member (which in many cases is a word group). These cbs are somewhat parallel to syntactic group cbs of the type *man-of-war* and have the same stress pattern: *jáck stráw*. *Jackass* is a real cpd with the first-word as a determinant and the second-word as the determinatum. Cbs of this type are accordingly stressed as cpds: *jáckàss*. The stress patterns sometimes overlap, often with the same word.

These combinations are Christian names to which a quasi-surname is tacked, on the analogy of real names. In Piers Plowman (B 4. 17) we find *tomme trewe-tongue*, while similar names of that epoch are *Johan Nameless, Johan Trewman* (see Skeat's edition of The Vision of William concerning Piers The Plowman, introd. p. XXX). The next semantic step is the use of such quasi-names as generic names. In "The Cook's Prologue" (23) we have *many a Jakke of Dover*, and the combination *Tom Fool* is quoted as early as 1356/7 (OED). It may be interesting to note that the corresponding German type, as in *Hanswurst, Hansnarr*, also belongs to the 14th c. (see Kl/EW s.v. *Hans*). English usage does not, however, seem to be older than the 16th century, when not only names of persons, but also plant names and names of animals are formed with first-names.

2.13.2.

Jack-combinations have at all times been the most frequent (see e.g. OED *jack* sb' 35—36 beside the main entries): *jack straw* 'man of no importance', *jack boots* 'the boots at an inn', *jack blunt* 'a blunt fellow', *jack pudding* arch. 'buffoon', *jack-in-the-box* orig. 'cheat, thief', *jack-a-dandy, jack-a-Lent* arch. 'figure of a man set up to be pelted', *jack-o'-lantern* orig. 'night watchman', *jack-of-all-trades, jack- out-of-service, jack-out-of-office, jack-in-office* 'consequential petty official', *tom farthing* 'a fool, a simpleton', *tom tiler* 'any ordinary man', also 'a henpecked husband', *jack-of-both sides, hobclunch, hoblob*, both obs., 'boor, rustic', *tomboy*, orig. 'boisterous boy', *tom-noddy* and many others.

Names of plants are *jack of the hedge, jack by the hedge* 'hedge garlic' 1536, *jack-o'-lantern* 'will o' the wisp' 1663, *jack-in-the-bush, jack-in-the-pulpit* 'an American herb', *jack-in-a-box* 'a tropical tree'. Cf. OED *jack* sb' 38.

3 Marchand, The categories

2. 13. 3.   With names of animals we have two groups. One is parallel to the preceding combinations, as *jackdaw* 1543, *jack-snipe*, *jack crow*, *jack curler*, *magpie*, obs. *maggotpie*, *tom-tit* 'a small bird' 1709, *tom-cod* 'name for several small fishes'. A second group with names of animals are those combinations in which the first element denotes sex. This type is not older than the 17th c. Among the earliest words are terms denoting falcons, as *jack-merlin*, *jack-hobby*, *jack-kestrel*. Other words are *jack-hare*, *jackass*. With *hob-* we have only *hob-ferret* 'male ferret'. *Jenny*-combinations, occuring since 1600, are *jenny-ass*, *jenny-hooper*, *jenny wren*, denoting the female. We have no other first-name to denote female sex, with the exception of *nanny* in *nanny-goat*. *Tom*-combinations denoting male sex of animals are not found before the second half of the 18th c.: *tompuss* 1762, *tom cat* 1809, and later *tom-dog*, *-turkey*, *-parrot*, *-swan*. The OED explains this usage from the name of the hero in a book published in 1760 "The Life and Adventures of a Cat". The hero bore the name of Tom and is commonly mentioned as 'Tom the Cat'. But probably the name Tom for cats was already in use, as *Tom puss* is attested for 1762, whereas the combination *tom cat* (i.e. without the article) is never used in the book. The combination *tom cat* was apparently coined on *tom puss*, which it ousted thanks to the popularity of the before named book.

Other names than the ones treated are rare, as *billy* in *billy-goat* 1861 'male goat' and *nanny*, only used in *nanny-goat* 1788 'she-goat'. *Billy-* forms a few 19th c. plant names also (see OED).

2. 13. 4.   *Hobgoblin* and obs. *hobthrush* were originally used as equivalents of 'imp, goblin'. The combinations subsequently came to denote animals also.

The tendency with sex-denoting first names is to use the type for smaller animals only, *jackass* being the only exception.

As semantic extensions of combinations denoting persons we have a few denoting things today, as *jack-in-the-box* 'a child's toy', *jack-o'lantern* 'lantern made of a pumpkin so as to resemble a human face'.

2. 13. 5.   *Jack-* and *tom-* combinations go back to the 14th c., *maggotpie* is recorded for 1573, *magpie* for 1605, *hob-* (a variant of *Rob*, *Robin*) combinations crop up in the 16th c., *jenny*-combinations occur from about 1600 on, *billy-* and *nanny*-combinations are still more recent (see the foregoing exs).

John- cbs are apparently not recorded before the 16th c. Exs are obs. *John-a-nokes* (orig. *John atten Oke* = John at the oak) 'fictitious name for one of the parties at legal actions', *John-a-stiles* (counterpart of preceding), *john-a-nods* 'one who is nodding or not quite awake', *john crow* 'name of the turkey buzzard in Jamaica', *John Thomas* 'a livery servant', obs. *John Trot* 'clown, bumpkin'.

2. 13. 6.   Infrequent is *Jim*, as in *jim-crow* 1875 AE (orig. 'name for a negro', also 'an implement for bending iron rails'), *jim-dandy* 1888 AE 'superfine person'.

For *Peggy-* cbs the OED has no quotations before the 19th c.: *peggy-with-(her)-lantern* = *jack-a-lantern*, also with regional English bird-names as *peggy-whitethroat*, *peggy-dishwasher*.

Cbs with *Jerry*, recorded since the 18th c., are *Jerry sneak* 'a sneaking fellow or henpecked husband' 1764, *Jerry-come-tumble*, *Jerry-go-nimble* 'tumbler, performer', *Jerry-builder* 'a speculating builder'.

With Dick and Dicky the OED has a few cbs which are not, however, StE.

2. 13. 7.   There is no fixed stress pattern for first name-surname cbs. Many, as the *Jerry*-cbs, have the pattern usual with real first name-surname cbs. With other cbs we observe a tendency toward unity stress, but the place of the stress varies. The indications of the various authorities also differ. Webster gives *tomcat*, *tomcod*, *tomtit* with forestress, OED and Jones give the same words (the word *tomcod* is not listed in Jones) with double stress. I have heard both pronunciations. The prepositional *Jack*-cbs have forestress with double-stressed variants for some of them in Jones, whereas Webster and OED give double stress for most cbs. *Jack-tar* has double stress in Jones and Webster, endstress in OED. The tendency to give forestress is observable with names of plants, things and animals as far as they do not denote sex. With sex-denoting cbs the tendency is in favor of double stress (but forestress in *billy-goat*, *nanny-goat*, *jackass*). Double stress also characterizes cbs denoting persons, as already pointed out, while others have endstress (*jack-a-dandy*, *jack-of-all-trades*, the latter with stress on *all*) or forestress (*jack-in-the-box*, *jack-in-office*).

Grammatically, the unity character is stressed by the group *-s*: *jack-a-dandies*, *jack-in-the-boxes*, *jack-in-the-pulpits*, *jack-o'-lanterns* etc.

2. 14. 1.   Types Fitzhérbert / Mac Árthur / Kirkpátrick (inversion-compounds)

As we have pointed out, English compounds are coined on a determinant/determinatum basis. Cases of determinatum preceding the determinant occur as syntactic groups which may result in lexicalized combinations. As they are not morphologically isolated from syntactic combinations, they cannot claim the status of compounds. We have treated them as lexical phrases.

Other combinations are coined after the pattern of a foreign language. In legal and semi-legal terminology, we have many substantives followed by an adjective. Such combinations, illustrated by *consul general*, follow the French word-order introduced into English through Law-French. As there is no competing syntactic group, we consider the type as morphologically isolated. In combinations that are felt to be syntagmas, i.e. combinations of full signs, the determinatum is the inflected part (but see JeMEG 2. 2. 41). Examples of the type are *brother german, sister german, fee simple, ambassador extraordinary, governor general, postmaster general, heir apparent, heir presumptive, court martial, letters dimissory, letters testimonial*.

A few early combinations lie outside the legal sphere, as *knight errant* (= F *chevalier errant*) 13..; *falcon gentle* (= F *faucon gentil*) c 1400; *crown imperial* (plant name) 1611. The combination *sum total* 1395 may be a direct translation of ML *summa totalis*. Translation loans from Neo-Latin are *gum Arabic, gum elastic* (= *gummi Arabicum*, *gummi elasticum*). A translation loan of a different type is *court-baron* 1542, an Anglo-French cb for earlier *court de baron*.

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All these cbs have double stress, though some of them show the group -*s* in the plural (see esp. Je II. 2. 41, but also the respective entries in OED and Webster; usage varies a great deal with each cb, according to the respective authorities).

There are a great many plant names with *herb* for a first member which are either translation loans from French, as obs. *herb Ive* 1386 (= OF *herb ive*) or from Medieval Latin, as *herb Robert* 1265 (= *herba Roberti*) and obs. *herb John* 1440 (= *herba Johannis*). Others are 16th c. and later coinages after the pattern. Exs are *herb Paris, herb Gerard, herb-Henry, herb-grace, herb carpenter* etc. There are also combinations with adjective determinants: *herb royal* (= F *herbe royale*) 1530 is alive, but others (as *herb impious, herb terrible*) are obsolete today (see OED s.v. *herb*). After the same pattern is coined *apple-John* 1597 (but also called *John-apple*) which is a forestressed cpd. DA records *peckerwood* 1835 as a western AE variant of common standard *wood-pecker*.

2. 14. 2.   Other types of inversion-compounds have a restricted range of derivative force. It is only with surnames that we find compounds of the types *Fitzherbert* and *MacArthur* and only with certain place names that the type *Kirkpatrick* occurs. Moreover, the morphemic character of *Fitz-, Mac-,* and *Kirk-* is dubious, synchronically speaking, as *Fitz-* is recognizable for the philologist only, while combinations with *Mac-* and *Kirk-* are identified by Irish and Scottish speakers only. We include the types here on the merit of their historical interest.

Type F i t z h e r b e r t. *Fitz* is the Anglo-Norman spelling of OF *fils* 'son', and the Normans formed patronymic names composed of *fitz* and the oblique case of the father's name (in a few cases where the mother is important, her name forms the second element, as *ihsu fiz mari, Henry le Fytz Empryce*). This practice was in later times extended to the surnames of illegitimate children of royal princes. Surnames coined on the pattern are numerous. A few exs are *Fitzgerald, Fitz-Hamo, Fitzharris, Fitzherbert, Fitz-Neal, Fitz-Osbern, Fitz-Peter, Fitz-Stephen, Fitz-Thomas, Fitz-Urse, Fitz-Walter, Fitz-Warenne, Fitz-William/Fitzroy*.

With the exception of forestressed *Fitzroy* the stress is on the second element. The first member has weak stress.

The corresponding Gaelic type of patronymic names is M a c A r t h u r, occurring in Irish and Scottish surnames. Spelling and stress vary. Many names are spelt as one word, in others the second elements begins with a capital letter through no word division is made between the two elements. Stress is more often on the second element, especially in Irish names. Stress on the first element often betrays the psychological effort of a person to efface his non-English descent. A few of the countless names are *MacAdam, Macdonald, MacGregor, MacIntyre*. In end stressed names the first-word has weak stress.

Celtic influence we have also with many place names of the type K i r k-p a t r i c k 'Patrick's church' in Northern England, Scotland, Wales and Ireland (see Ekwall, Scandinavians and Celts in the Northwest of England, Lund 1918).

COMPOUND EXOCENTRIC SUBSTANTIVES[1]

2. 15. 1.   Type píckpòcket

forms exocentric cpds denoting the agent who or which performs what is indicated by the predicate/object nexus of the formal basis. The agent may be a person, an animal, a plant, a thing, or something immaterial. Personal sbs are recorded as early as the beginning of the 14th c. while words of other sense groups do not seem to occur before the 15th c. The type arose under the influence of French imperative words, and as Old French words almost all denote living beings, this type was imitated in English. The use of the type for other meanings is perhaps an independent English development.

Early exs of personal agent sbs are obs. *trailbastoun* 1305, *spurnwater* 1347, *spilltime* 1362, *cutpurse* 1362, *letgame* 1374, obs. *pickpurse* 1386, *lickpot* 1387, *chopchurch* 1391, *pickthank* 'toady' 1412, *pinchpenny* 1412, *lickdish* 1440, *wantwit* 1448. There has been an uninterrupted flow of coinings ever since.

Personal sbs have at all times had a pejorative tinge, so the type has never been a rival of suffixal agent sbs. A very few cbs only are neutral terms designating the holder of an office, but even then the occupation is always an inferior one: *turnspit, turnbroach* 'boy whose office was to turn the spit' 1606, *turnkey* 'a subordinate jailer' 1654, *scarecrow*, orig. 'person employed in scaring birds' 1553, *turncock* 'a waterworks official' 1711, *prickbill* (term used at Christ Church, Oxford, for a junior student checking the attendant list at Chapel) 1825. All other personal sbs are contemptuous or ridiculing terms (in slang there are many more of them), designating disreputable persons, as criminals (*cut-throat* 1535, *picklock* 1553), drinkers, gluttons, parasites (*fill-belly* 1553, *fill-pot* 1616, *tosspot* 1658, *lickdish* 1440, *lickladle, lickplatter* 1571, *lickbox* 1611, *lickspit, lickspittle* 1629), slanderers (*pickthank* 1412, *telltale* 1548, *findfault* 1577), idlers (*donothing* 1579, *donought* 1594), mischiefmakers (*killjoy* 1776, *spoilsport* 1821), sluggards, stupid or ignorant persons (*lackbrain* 1596, *lackwit* 1667, *lacksense* 1881, *lackmind* 1887, *knowlittle* 1651, *knownothing* 1739), scoundrels, ruffians (*rakehell* 1550, *rakeshame* 1599, *lack-grace* 'reprobate' 1817), unreliable persons (*turncoat* 1557, *turnskin* 1831), prodigals and misers (*pinchback* 1600, *spendthrift* 1601, *pinch-belly* 1648, *pinch-gut* 1659, *turn-penny* 1824), the least objectionable quality being perhaps that denoting one who is a *dare-devil* 1794.

The type forms many nicknames, as *scaldrag* 'dyer' 1630, *scrapegut* 'fiddler' 1837, *sawbones* 1837.

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[1] W. Petersen, Der Ursprung der Exozentrika. Indogermanische Forschungen 34 (1914—15) 254—285. — W. Uhrström, Pickpocket, Turnkey, Wraprascal and Similar Formations in English. Stockholm 1918. — G. Langenfelt, Select Studies (see Bibl.) 76f., 82ff. — A. Darmesteter, Traité de la formation des mots composés dans la langue française (Paris 1894) 168—234 (reprinted in Meisterwerke der romanischen Sprachwissenschaft, edited by Leo Spitzer. München 1929. I. 232ff.).

2. 15. 2.   No pejorative tinge is inherent in other than personal sbs. Here
belong names of animals, as *wagtail, bangtail, swishtail, shufflewing, turnstone,
shearwater* (birds), *burst-cow, tumble-dung* (insects), *stay-ship* (a fish). "The
number of popular plant-names ... is considerable" (Uhrström): *catchfly,
cover-shame* 'plant used to procure abortion', *heal-all, kill-lamb, tear-thumb,
cut-finger* a.o.

Impersonal material agents (tools, devices etc.) are denoted by *turnpike*
'barrier' 1420, *breakfast* 1463, now arch. *cover-slut* 'apron' 1639, *turnstile* 1643,
cutwater 1644, *stopgap* 1684, *turn-buckle* 'catch, fastening' 1703, *wraprascal*
'loose garment' 1716, *breakwater* 1721, *stay-stomach* 'snack' 1800, *dreadnought*,
orig. 'thick coat or cloth' 1806, *turntable* 1835, tangle-foot 'whisky' 1860,
while immaterial agency underlies *make-rime* 'phrase used for the rime',
make-talk 'something said for the sake of talking', *make-way* 'event which
leads up to another', a.o.

Some cbs are only used as adjs: *break-back* 1556, *break-neck* 1562.

2. 15. 3.   History of the type *pickpocket*.

No coinings are recorded from OE. The earliest ME words date from about
1300 (only *pickpocket* words) which have a colloquial character. The late oc-
currence of the type seems to point out that the t. *pickpocket* arose under the
influence of French where coinings of the type *coupe-gorge* 'cut-throat' were
numerous (*coupe-gorge* 'cut-throat' from the 13th c.; *coupe-bourse* 'cutpurse'
is recorded from the 12th c., proper names of the type are much older). Dar-
mesteter has convincingly shown that these combinations are imperative
phrases by origin. A person or a thing with which one has an intimate con-
nection (an animal, a tool, a place) is adressed in an encouraging, challenging
or mocking way, and this address then serves as a name. Well-known is the
name of the hero of Hastings, *Taillefer*, and the cock *Chantecler*. Darmesteter's
brilliantly written treatise is of interest for the comprehension of imperative
words in general.

Imperative words are rather recent in the history of IE languages. None are
found in Old Greek or Latin, which is not surprising as such combinations are
not likely to have originated in literary language at all. It is, however, possible
that they did exist in the speech of the lower classes, as Jacobi (Compositum
und Nebensatz, p. 73, q. Wilmanns 304. 8 note) rightly supposes. They begin
to abound in the Romanic languages, which had no literary tradition. It
cannot be proved to what extent English *pickpocket* words have ever been felt
as imperatives. They may never have been more than substantivized phrases
'verb/object' with an agent-noun sense, though substantivized imperative
sentences clearly show the early existence of imperative feeling (see the names
from Piers Plowman). Plant-names of the type *forget-me-not* need not be
patterned on F 'ne m'oubliez mye' (OED), as German, Danish and Swedish
show the same type. A post hoc does not prove a propter hoc. AE *speak-easy*
is an almost visual imperative, suggestive of the 'hush, hush' with which one
is shown into a bar. It is possible and even probable that imperative words
existed in English before 1300, but we have no OE colloquial texts. The sudden
rise of numerous coinings may be due to the latent energy released through the

French pattern. I have myself witnessed a similar thing in Turkish. In Turkish, there are very few common nouns on an imperative pattern. But when in 1934 everybody had to find a family name for himself, thousands of them were coined as imperatives, all of a sudden, and apparently out of nothing. Whatever the psychological substratum of the 'pickpocket' type may be, it has proved exceedingly productive in English and caused the rise of another agent-noun type, *runabout*.

2. 16. 1.   Type rúnaboùt[1]

forms exocentric agent sbs from verbal phrases whose second constituent is an adverbial complement, most often a particle. The type is essentially a variant of t. *pickpocket* though it is usually classed with *blackout* (cp. 2. 17; Biese, Jespersen, Lindelöf). The meaning is 'one who (sometimes that which) runs about'.

Like *pickpocket* words, personal sbs of the type *runabout* are not neutral in meaning and therefore not rivals of suffixal agent sbs. Most of them have a derogatory connotation, many are slang words, and a few words which are not pejorative (*standby* 'helper', *stand-off* 'the halfback in Rugby football' are the only words I can think of) do not disprove the general character of the type.

With the exception of impersonal *lean-to* 'shed' 1461, and *start-up* 'kind of boot' 1517, cbs are recorded from about 1550 on: *runaway* 1547, *runabout* 1549 (once before in P. Pl. B. 6. 150 as a proper name: *Robert renne-aboute*), *holdfast* 'clasp' 1576, *holdback* 'hindrance' 1581, *pullback* 'adversary' 1591, *sneakup* 1596, *go-between* 1598, *stirabout* 1682. In the 16th and 17th c. a good number of words were coined which are now obsolete (*hangby* 'parasite', *holdfast* 'miser', *startback* 'deserter', *go-before* 'usher', *lieby* 'mistress' *fallaway* 'apostate' etc.). Only a few cbs are recorded from the 18th c., as *lie-abed* 'late riser' 1764, the now dial. *rouse-about* 'restless p.' 1746, *ne'er-do-well* 1737, *come-by-chance* 'bastard' etc. 1760.

The 19th c. was very productive. We find *dragout* 'girl partner for an occasion' sl, later *gadabout*, *setup* 'poor fighter', *die-hard*, *turnback* 'coward', *stowaway, goback, hangback* 'hesitater', *stay-away, roust-about* 'handy man' etc., *knock-about* 'actor of violent and noisy pantomime', *stay-ashore, standby, stay-at-home* a.o. From the 20th c. are recorded such words as *sneak-away* 'coward', *butt-in* 'intruder', *cutup* 'expert' sl a.o. There are many slang terms which cannot be dated at all.

2. 16. 2.   Words denoting impersonal agents are less numerous. Exs are *holdback* 'hindrance', *holdfast* 'clasp', *knockdown* 'liquor', *takeup*, *pickup* (two words for machinery devices), *setback* 'check to progress', *rockaway* 'a vehicle' AE, *tilt-up* 'the American sandpiper'.

Though considerably weaker than the very prolific impersonal type *blackout*, the type *runabout* is pretty productive.

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[1] U. Lindelöf, English Verb-Adverb Groups Converted into Nouns. Helsinki 1937 (Societas Scientiarum Fennica. Commentationes Humanarum Litterarum IX. 5). — A. G. Kennedy, The Modern English Verb-Adverb Combination. Stanford University. California. 1920. — Verb/Adverb = Noun, by Edwin R. Hunter. ASp 22 (1947) 115—119. Gives a list of 223 words, classified according to the environment in which they are used. Makes no claim for completeness.

2. 16. 3.   Lindelöf, Biese, and Jespersen treat types *runabout* and *blackout* as one. Historically, this does not seem to me to be justified. It is obvious that personal sbs, i.e. agent nouns, did not originate in impersonal sbs of the type *blackout*. The type *runabout* probably arose from the type *pickpocket* and was, at the beginning, not connected with the impersonal type *blackout* because this latter did not exist. "Of the combinations in our material which appear in a personal sense (a little more than seventy in number), more than half (c. 40) show only a personal sense or appear in such a sense earlier than with any other signification" (Lindelöf 35). It may be objected that there are also personal derivatives from simple verbs, as *sneak, cheat, coach* etc. But if we check their history, we see that this type is not older than the 16th c., with the exception of *help* 'helper' which is OE in this meaning. Hertrampf has very few personal sbs, and Biese confirms the rareness of 'converted' sbs: "the conversion-substantives used in a personal or concrete sense are, especially in the earlier stages, of comparatively slight importance" (Biese 308). Lindelöf himself feels compelled to suggest that "the origin of this type (= t. *runabout*) is perhaps to be found in imperative phrases" (35). Such an assumption is certainly supported by the early existence of so many cbs whose imperative character cannot be denied. Since the Late Middle English period imperative words have been frequently used to coin proper names (surnames). A few instances are *Lovegold, Makejoy, Mendmarket, Drinkwater, Breakspeare, Shakespeare, Shakestaff, Hackblock, Hurlbat, Shakelance, Scaredevil, Lackland, Trustgod, Doolittle | Cutright, Golightly, Playfair, Treadaway, Walkup, Drink-low.*

As for surnames, *Piers Plowman* offers rich examples, as *Do-wel, Do-bet, Stelenoght, Sle-noght, Here-wel,* etc., also longer imperative sentences, as *Bere-no-fals-witnesse, Trewe-tonge-tell-me-no-tales, Suffre-til-I-se-my-tyme, Suffre þi souereynes to haven here wille.* Langenfelt (pp. 76/77 and 84/85) has some more coinings from LME, he also quotes Puritan names such as *Kill-sin, Fly Debate, Praise-God, Fight-the-Good-Fight-of-Faith, Weep-not, Be Faithful.*

2. 16. 4.   Cp. also the many other common sbs made up of a verb and an adverbial complement, as *hop-o'-my-thumb* 1530, the plant-names *forget-me-not* c 1532, *touch-me-not* 1597, *livelong* 1578, *pissabed* obs. 1565, *kiss-me-quick* 1882, more recent (= 19th c.) *pick-me-up* 'stimulating drink', *hand-me-down = reach-me-down* 'ready made or second-hand garment', *speak-easy* where the circumstances from which the expression derives is clearly recognizable, in most cases by the first person pronoun as reference to the speaker, and whose conceptual analysis has therefore not conformed to that of *runabout* cbs.

It is interesting to note that the earliest instance recorded of vb/adverb groups is *lean-to* 'shed', obviously originating in an imperative. It is also worthy of note that, with the exception of the rare word *sit-up* 'surprise' 1483 (which, by the way, cannot be considered as derived from any vb, as *sit up* vb with meaning 'be surprised' is first recorded 1889), action sbs of the type *blackout* do not seem to occur before 1550 and are infrequent before 1650 which seems to clinch matters in favor of *runabout* being an offshoot of *pickpocket*.

Other cbs have the same analysis as *runabout* compounds but have a prepositional group or an adverb as second constituents: *slug-abed, stick-in-the-mud,*

sit-by-the-fire, stay-at-home, lie-abed, ne'er-do-well. This morphological make-up is characteristic of names for persons or personified things; it never occurs with impersonal sbs of t. *blackout*.

Other imperative words are *happy-go-lucky*, orig. adverb with meaning 'as luck will have it' 1672 (sb 1851, adj 1856), *ne'er-do-well* 1737, *never fail* 'person who never fails one' 1850.

2. 17. 1. Type bláckoùt

While semantically following type *pickpocket*, the type *runabout* is morphologically the same as the type *blackout*. The latter forms impersonal deverbal sbs in senses usually expressed by such derivatives. Most frequently, however, cbs of type *blackout* denote an act or specific instance of what is expressed in the verbal phrase.

Compounds are not numerous before 1650. The earliest are *situp* 'surprise' 1483, rare, *put-off* 'shift, excuse' 1549, *holdfast* 'action of . . .' 1578, *pull-down* 'action of . . .' 1588, *hop-about* 'dance' 1593, *start-back* 'action of . . .' 1626, *pass-by* 'Passover' 1550—1660, rare, *turn-about* 'vertigo (disease)' 1598—1611, *come-off* 1634, *go-down* 'retreat', *turn-over* 1660, *Passover* 1662, *set back* 1664, *wind-up* 1665, *pull-back* 1668, *turn-out* 1688, *draw-back* 'act of drawing back a sum paid as a duty' 1697, *put-back* 'reverse' 1697. No other cbs appear to be recorded before 1700. The 18th c. adds about 30 cbs (acc. to Lindelöf), but of the cbs now in use only 17% make their appearance before 1800 while more than two thirds have been coined after 1850 (Lindelöf). Lindelöf points out the great influence of American English in the development. Of the cbs recorded between 1850 and 1900, 33% are American English, of those attested after 1900, the percentage is 37%. Lindelöf has collected about 450 exs, but there are many more now, as the type is growing daily. Quite recent are *bombout, playback, fallout, flashback*.

2. 17. 2. This is a short collection of compounds illustrative of the type. *go-off, get-up* 'dress, array', *get-away, call-down* 'reprimand', *hold-up* 'robbery', *let-up* 'cessation', *mix-up* 'muddle', *put-in* 'interference', *send-off* 'farewell gathering', *lock-up, lock-out, hangout, break-down, clean-up, come-back* 'retaliation', *lay-off, layout, layover, shutdown, lookout, look-in, rake off* 'profit', *stand-in, walk-out, frame-up* 'conspiracy', *showdown, cut-out* 'automobile attachment', *hand-out* 'food or clothing given to a beggar', *slip-over, pullover* 'sweater', *make-up, washout, takedown, take-in, take-off, take-up, pickup, change-over, spread-over* 'a working hour arrangement', *pop over* 'kind of quick bread' AE.

The following words (chiefly from the Dictionary of Americanisms) appear first recorded in American English: *dustup* 'uproar' etc. 1897, *fade-away* 'act of disappearing' etc. 1911, *fetch-up* 'the sudden stop at the end of a fall' 1866, *flashback* 1918, *frame-up* 1907, *freeze-out* 'a variety of poker' 1856, *go-back* 'one who returns to the East after making a poor go of it in the West' 1859, *hangover* 1894, *hookup* 1903, *kickback* 1940, *line-up* 1896, *run-around* 'a felon' 1872, *sell-out* 1883, *slop-over* 'instance of going to excess' sl 1908, *stand-off* 1843, *shape-up* 1942 (ASp 29 [1954] 285). A word coined in connection with atomic energy experiments is *fall-out* 1952 (ASp 29 [1954] 73).

2.17.3. Many combinations have several meanings, as is often the case
with deverbal impersonal nouns: *takedown* may be the act or an instance of
taking down, esp. a humiliating, it may also be the part of a rifle; *take-off* is
the act of taking off or the place connected with it; a *turnabout* is the act or an
instance of turning about, while in AE it has also the concrete meaning 'merry-
go-round'; a *setback* is an unexpected check, in AE it also has the concrete
meaning 'eddy'.

The types often overlap so that a combination belongs to the type *runabout*
as well as to the type *blackout*. *Turn-about* in the sense 'a radical' as well as in
the sense 'merry-go-round' are the type *runabout*; so is *pickup* for a gramo-
phone device, *turnback* for one who lacks courage, *cut-off* for a stopping device,
to give only a few instances, which in other meanings belong to the type
blackout.

As with *runabout*, the second-word of a cb is usually a locative particle or
secondary locative particle, as *back*, *down*. Other second-words we have in
say-so 'dictum', *think-so* 'a mere opinion', *standstill*.

2.17.4. About 20% of the *runabout* and *blackout* cbs studied by Lindelöf are
(also) used as preadjuncts (= attributes). For this primarily syntactic phe-
nomenon see also Jespersen MEG II. 4. 70—76.

Despite many traditional stress indications of OED (giving endstress to e.g.
set-to, *come-down*, *cut-off*), the pattern heavy stress/middle stress is now morpho-
phonemic with both *rúnaboùt* and *bláckoùt* cbs (see also Kennedy 47).

2.18.1. Types **húnchbàck / pálefàce / fíve-fìnger / scátterbraìn** (bahuvrihi
        compounds[1])

2.18.1. Bahuvrihi compounds are exocentric formations denoting one who
or that which is characterized by what is expressed in the compound. We
often name a person, animal, or thing for some striking feature in his or its
appearance, also for other characteristics serving as labels by which the person
(animal, thing) is subsequently identified (for details concerning the process
see Darmesteter and Petersen). In principle, any simple word is susceptible of
being used in this way (cp. E *boots* for one hailed by the word 'boots', G
Zwerg Nase), but compounds are naturally more numerous. Everybody has a
face, but not everybody has a pale face.

2.18.2. The bahuvrihi types are obviously the same as the ones we have
found with common endocentric compounds. It must not, however, be thought
that bahuvrihi cpds are what was formerly called 'mutated determinative
cpds' (for earlier views held on the subject see Petersen 273, fn. 1). Both types
of cpds existed side by side. In the Germanic languages, moreover, the type
paleface was in use when the corresponding determinative type *blackbird* was

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[1] W. Last, Das Bahuvrihi-Compositum im Altenglischen, Mittelenglischen und
Neuenglischen. Dissertation. Greifswald 1925. — W. Petersen, Der Ursprung der
Exozentrika. Indogermanische Forschungen 34 (1914—15) 254—285. — E. Fabian,
Das exozentrische Kompositum im Deutschen. Leipzig 1931 (Form und Geist,
Band 20). — A. Darmesteter, Traité de la formation des mots composés dans la
langue française (see footnote p. 37).

still in its infancy (see Carr 162—163). Lastly, the type *five-finger* has no parallel in the determinative cpds in the early periods of Germanic (Carr 164). Bahuvrihi cpds of the type *scatterbrain* do not exist in West Germanic. In German they make their appearance in the 14th and 15th centuries; in English they do not appear to have been formed before the Modern English period.

2. 18. 3.   The origin and history of bahuvrihi cpds has been much discussed (for details see Petersen 254—257. He does not mention Darmesteter who had expressed ideas similar to his, see Darmesteter 50—65. Cp. also Henzen 90). As Petersen has convincingly shown, the origin of exocentric cpds is to be sought in the practice of namegiving. Bahuvrihi cpds occur very early in the IE languages (OGr *chrysokómē* 'golden-hair' (a plant), *chrysókarpos* 'ivy', *tripous* 'tripod' a.o.), but most of them were only used as adjs. In OE and the early Germanic languages in general, we find no common sbs of bahuvrihi formation, while personal names, such as OE *Widsith*, OHG *Hartmuot* do occur. Brugmann (Gr. 2. 2². 654) and Petersen (274—277) point out that the adjectival function must have arisen out of the appositional use of bahuvrihi sbs in conjunction with personal names (*rhododáktylos ēós* = Rosefinger Eos) which is probably how the adjective character in fact originated. But it still remains to be shown why the Germanic languages use bahuvrihi cpds as adjs only.

2. 18. 4.   Whatever the reason may be, all OE bahuvrihi formations are adjs, with the exception of the type *five-finger* which formed plant-names (though only as translation loans of Latin words: *fiflēaf* 'quinquefolium', *hundeshēafod* 'cynocephalus' (q. Carr 166). There is also the sb *ānhorn*, formed on the Latin adj *unicornis*.

The type *hunchback* was comparatively weak in OE (with exs such as *wulf-heort* 'wolf-hearted', *stȳlecg* 'steel-edged'). The type *paleface* was pretty well developed (with instances such as *heardecg* 'hard-edged', *fāmigheals* 'foamy-necked', *heardheort* 'hard-hearted', *bærfōt* 'barefooted'). Both types had practically ceased to be living types by the ME period though *barehead* 1320 and *bareback* 1562 were formed on the analogy of *barefoot*. They are, however, adverbs as far as present-day speech-feeling is concerned.

2. 18. 5.   Bahuvrihi cpds as sbs have slowly developed since the ME period, but are rare before the 16th c. Early coinages are words such as *white-thorn* 1265, translating L *alba spina*, the nickname *court-mantle* 1367, the fish-name *stickle-back* 14.., the bird-name *redbreast* 1401, the nicknames *hotspur* 1460 and *hare-foot* 1410. They are much in favor today, as recent words such as *high-hat* 1899, *rubber-neck* 1896, *highbrow* 1911 (all originally Americanisms) show. The rise of substantival bahuvrihi cpds in ME is connected with the "adjectivisation" of the types, chiefly by means of *-ed* (see Carr 252—267). This extension goes back to OE, so when, say, *red-breasted* had become the normal adj, the way was free for *redbreast* as a sb. Similar adaptations to genuine adjectival types were effected in other Indo-European languages (see Brugmann, Grundriß 2. 87 ff. and Wilmanns 2. 313, Carr 252—267).

In modern scientific and technical terminology we have many substantival and adjectival bahuvrihi-cpds (see *uni-*, *multi-* and other number-denoting prefixes).

2. 18. 6. Substantive bahuvrihis all date from modern times in Germanic languages. Considering that in OE they are practically non-existent and that in German only about 5 instances appear to occur between the 8th and the 13th century, it is impossible to subscribe to Carr's opinion that "there is then a direct line leading from the original type of Substantive Bahuvrihis in the parent Indo-Germanic language through Primitive Germanic, where the traces are almost obliterated, down to the modern representatives of this type" (170). And to say that bahuvrihi sbs "belong primarily to the vulgar or non-literary stratum" of the language (169) is certainly no argument to explain why they are not recorded. They have that particular tinge today, if only when applied to human beings, so names of things might always have been possible. Bahuvrihi sbs were not derogatory in the older IE languages.

The late rise of substantive bahuvrihis in English (and German) seems to me to be connected with the rise of the other group of exocentric compounds, i.e. *pickpocket* cbs in whose wake I think bahuvrihis were created. As Petersen has pointed out, there is no difference in principle in the coining of the various exocentric cpds, all denoting one who or that which is characterized by a phrase applied to him or it. This also seems to explain the usually derogatory shade of meaning modern bahuvrihi sbs have, as far as personal sbs are concerned. It is a trait that all exocentric cpds have in common. So I do not think there is anything intrinsic in the derogatory character of bahuvrihis. As the original pattern, the *pickpocket* words, inherited this shade from their French patterns, they carried it on and gave rise to the same connotation in other exocentric cpds formed later.

2. 18. 7. The strongest type is *paleface,* the weakest are *hunchback* and *scatterbrain* which have formed a few words only. The cpds chiefly denote living beings (persons or animals), but there are also plant names and a few words denoting various things. Words denoting persons have in most cases a depreciative or mocking tinge. The following is a short list of exs (p a l e f a c e and h u n c h b a c k): *bigwig, blackmouth* 'slanderer', *boldface* 'impudent p.', *fathead* 'stupid dolt', *flatfoot* 'policeman' (A sl), *flathead, flatnose, greenhorn, green-sleeves* 'inconstant lady-love', *greybeard, grey-coat, hardhead, highbrow, highhat* AE, *hotbrain, hothead, hotspur, lighthead, lazybones, lightskirts* 'woman of light character', *longhead, madbrain, numbskull, paleface, redcap, redcoat, redhead, roundhead* (various meanings), *sobersides, softhead, sorehead* AE, *squaretoes, thickhead, thickskin, tightwad, whitebeard, whitecoat* (a soldier), *woollyhead* 'negro', also 'abolitionist' are words denoting persons, as well as *bonehead = blockhead = lunkhead = bullhead, doughface* AE, *humpback, hunchback, lionheart, madcap* (*mad* is used as primary), *pot-belly, rubberneck* AE, *egghead* 'intellectual' AE.

Words denoting animals are *black-face* 'blackfaced sheep', *blackhead* (a bird), *bluecap* (various animals), *greenshank* 'the sandpiper', *greyback* 'louse' AE, *open-bill* (a bird), *rawhead* and *bloodybones* (nursery animals), *redleg(s), whitethroat* (birds), *redbreast* 'the robin', *shorthorn* (kind of cattle), *wryneck* (orig. a bird), *thick-knee* (a bird) / *stickle-back* (a fish, fr. *stickle* 'prick, sting').

Plant-names are *blue-bell, whitethorn, longleaf* 'the Georgia pine', *red-berry* (an Amer. plant), *red-knees* 'the water pepper', *red-root* 'New Jersey tea' a.o.

Bahuvrihi-cpds are often used for nicknames and surnames: *Longshanks* was the nickname of Edward I., *court-mantle* a surname of Henry II. (= short cloak). Well-known names are *Leather-stocking, Bluebeard.*

Non-concrete are *blackleg* 'name of a disease', *flat-foot* 'name of the bodily defect', *faintheart* in the now obs. sense 'faintheartedness'.

2. 18. 8.   The type scátterbrain is weak; I have only modern exs: *crack-brain* 'crack-brained p.' 1570, *draggle-tail* 'a draggle-tailed p.' 1596, *shatterbrain* 1719 = *scatterbrain* 1790, *spring-tail* 'species of insects that spring by means of their tails' 1797, while *muddlehead* 1853 is backderived from *muddleheaded* 1759.

2. 18. 9.   The type five-finger forms a special group insofar as cpds of this type do not exist outside the domain characteristic of bahuvrihi cpds. The second-word is in the singular, the same use we have in syntactic phrases: *a five-act tragedy, a two-horse carriage* etc. Of the various bahuvrihi types, *five-finger* is the only one that formed sbs in OE (the type *scatter-brain* is MoE, anyhow), such as *ānhaga* 'hermit' (lit. 'who has one enclosure'), *ānhorn* 'unicorn'. From the OE period are the plant-names *five-finger* and *five-leaf*. Modern plant-names are *one-berry* 1548 and *nine-bark* 1859 (Amer. shrub). *Nine-holes* 1573 and *nine-pins* 1580, both names of games, betray their modern coinage by the plural form of the second-word. The type has hardly much formative power any longer, unless we reckon here words such as *one-step, two-step* which I think are really clipped cpds (the word *dance* being dropped) just as *four-oar* for *four-oar boat, three-star* for *three-star brandy* and others. Otherwise the idea 'he or that characterized by . . .' is expressed by the type *fourwheeler* (see sf *-er*).

2. 19.   Type dúgout

This type has formed a very few words only. The type word is originally American English and first recorded from 1819. Other instances are *left-over* 1897, *sawed-off* 'short person' (q. Kennedy 47, not in OED or Spl.). Others, as *cast-away, cutaway, come-by-chance* may belong here, but have been treated as cbs of the type *runaway.*

REDUPLICATIVE COMPOUNDS

2. 20. Types **tick-tick, choo-choo** etc.

There are compounds formed by the reduplication of a sign. Such a repetition naturally serves to underline the semantic content of the sign in one way or another. In English, the use of repetition is almost completely restricted to expressive sound words.

As a description of the sound (e.g. *his heart went thump thump*) repeated words are individual acts of speech with no morphologic status of their own. They are on a level with *yes, yes*; *no, no*; *hush, hush* which are intensifications of the single word with an independent stress on each element. Used as substantives or verbs, however, reduplicated compounds of expressive words have forestress. They all mean 'instance, act of . . .', implying monotonous repetition or continuation of the sound. Though, theoretically, any expressive sound word is reduplicable, the practice is more literary than colloquial, in American English even more so than in British English. Examples are *clamp-clamp*, *clop-clop* (both of hoofs), *click-click* (of a needle, a loom), *clink-clink* (of trucks), *clump-clump* (of boots), *clunk-clunk* (of oars), *chuff-chuff* (engine, train), *thump-thump* (of crutches), *pad-pad* (of shoes), *tick-tick* (of a clock), *tap-tap* 'a series of taps'. These reduplications also occur as verbs, if less frequently.

In some cases, the expressive basis does not exist outside its use in a reduplicated compound, as in *bumbum* 'monotonous music', *blahblah* 'twaddle, nonsense'.

The language of the nursery knows a few concrete substantives, as *tick-tick* 'clock', *quack-quack* 'duck', *choo-choo* AE = *puff-puff* BE 'train'.

Of words expressive of motion I have only found *jóg-jòg* 'with a jogging motion' adv, but no substantive or verb.

Non-expressive signs are not usually reduplicated. There are only a few adjectives which, through doubling, acquire a contemptuous nuance, as *goódy-goòdy* 'weakly, sentimentally, or affectedly good' 1871, *prétty-prètty* 'affectedly pretty' 1875, *gìrly-gìrly* 1891. Cp. F *joli joli* 'pretty-pretty' as against *joli* 'pretty', *train-train* 'monotonous routine' as against *train* 'routine'.

Only used as adjectives are *hush-hush* 1919 (as in *a hùsh-hùsh atmosphere*), *never-never* (only in *never never land*, orig. North Queensland in Australia) 1884. As an additive combination is formed *fifty-fifty* 'on a basis of fifty percent each' adv and adj, 1913.

Word-formation cannot treat of unmotivated, i.e. unanalysable words such as *gris-gris* 'kind of amulet' 1763 DA, *foo-foo* 'outsider' (as a term of contempt) 1848 (though perhaps emotively expressive), *titi* (a shrub) 1827 DA. In English, such words are simple signs[1]. They are not comparable to ablaut and rime combinations which are motivated by their forms.

Reduplicated compounds in English are 19th century and later.

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[1] The reader finds a collection of such words in G. Kirchner, Silbenverdoppelung ohne Vokaländerung, Anglia 65 (1941) 328—340.

COMPOUND ADJECTIVES

2. 21. 1. Types heádstròng / gráss-greén

The first-word is a sb qualifying the adj. Cbs of the heádstrong type have the general basis '(strong) in respect of, with regard to . . .', etc. The relations underlying the cbs are not as manifold as those with compound sbs. In syntactical cbs they could often be rendered by the prepositions *of, from, at, against,* sometimes *to* (*threadbare, skintight*). *Pot-valiant* means 'v. thanks to the pot'. Examples are *airtight, watertight, bomb-proof, damp-proof, fire-proof, hole-proof, waterproof* (and other *-proof* cbs), *colorfast, colorblind, snowblind, moonblind, blood-thirsty, book-learned, brainsick, carefree, heartfree, heartsore, heartsick, lovesick, seasick, homesick, pot-valiant, sleep-drunk, earthfast* 'fixed in the ground', *pennywise* and *pound-foolish, purse-proud, threadbare, blood-guilty, life-weary, battleworthy, praiseworthy, noteworthy, folk-conscious, music-conscious, tone-conscious* (*conscious* is a vogue second-word in AE, and cbs are formed ad libitum).

2. 21. 2.   The relation underlying cbs of the type gráss-gréen is that of emphatic comparison; usually with the implication of highest possible degree. Exs are *piping hot, scalding hot, roaring drunk, pig drunk, snow-white, milk-white, purple-red, blood-red, honey-sweet, sky-blue, stock-still, stone-blind, stone-still, stone-deaf, stone-cold, stone-dead, coal-black, pitch-black, pitch-dark.* Condensed cpds are *mother-naked, brand-new, fire-new* 'as new as a piece of iron coming just out of the fire', also cbs such as *dog-mad, dog-tired, dog-poor, dog-weary, dog-sick, dog-cheap* (the *dog-* cbs are reduced cpds, so to speak, the implication being 'as mad as a mad dog' etc.). We find individual coinages such as *straw-pale, moon-white, moon-still* (Thomas Wolfe).

Common are also dimension-denoting adjs as second-words. Exs are *knee-deep, skin-deep, breast-high, heaven-high, sky-high, mile-high, nation-wide, world-wide.*

2. 21. 3.   Both types are OE. Most PE words, however, were coined in the MoE period. Older are *steadfast, earthfast* (prob. revived, OED has no quotations between 1000 and 1868), *toll-free* OE, *threadbare* 1362, *watertight* 1387. But it should be noted that words with the sfs *-ful* and *-less* and the semi-sfs *-like* and *-worthy* originated as cpds of the type *headstrong*. With the exception of *-like* words (which are not older than the 15th c.) they were still full compounds in OE. For type *grass-green* we have many more older words: *bloodred, grass-green, honeysweet, milkwhite, snow-white* are OE. Later are *coal-black* 1250, *stone-dead* 1290, *nutbrown* 1300, *stone-blind* 1375, *stone-hard* 1400 (other *stone-* cbs are MoE), *knee-deep* 1400, *stock-still* 1470. Cbs with *dog-* do not appear before the 16th c., the earliest recorded being *dog-cheap* 1526. One of the most recent of the second group is *nation-wide* 1920 (OED Spl.), coined after *world-wide* 1632. The type has been spreading recently (*faculty wide, city wide* etc.).

2. 21. 4.   Cbs of the *headstrong* type always have forestress, in preadjunctal as well as predicative or isolated position. The stress indication of Webster and Kenyon-Knott (with double stress) for words with *-tight* and *-proof* (*airtight, watertight, waterproof*) must be a mistake. The second-words have a full stress in explicit contrast only (*not watertight but waterpróof*).

Cbs of the type *grass-green* have double stress, with the usual stress shifting in preadjunctal position. Cbs with *long* for a second-word are only used attributively and are therefore always heard with the main stress on the first-word: *age-long, day-long, lifelong, night-long, span-long*. The idea of highest possible degree also underlies *bank-full, brim-full* (though the latter is now partly apprehended as a sf formation with *-ful*), *top-full* (cp. also the semantically related syntactic cbs *crammed full, packed full*). In *dead tired* we have an adj used as primary, in *scalding hot* the first-word is said to be the vs (OED), but it may as well be the ptc (cp. G *kochend heiß, glühend heiß*). Otherwise English has no cbs with vbs for first-words (*pack full* is hardly common beside *packed full*).

In *sure-fire* AE 1918, we have an inverted cpd, the second element of which is not, however, felt to be connected with the word *fire*.

As for the difference in stress between the two types, we have the exact parallel in German: cpds such as *sorgenfrei, farbenblind* have forestress while *schneeweiß, stocksteif* and others of the 'grass-green' type have double stress in absolute or final position and forestress in preadjunctal position.

2. 22.   Types áll-áble / sélf-adáptive

The type h e a d s t r o n g has a parallel in the type s e l f - a d a p t i v e. The adj is qualified by the pronoun *self*. The general denominator of the notional relation underlying the cb is '. . . in respect of the self'. Exs are *self-assertive, -conscious, -defensive -destructive, -elective, -evident, -existent, -forgetful, -glorious, -improvable, -important, -luminous, -pleased, -righteous, -satisfied, -secure, -sufficient* and many others. The relation which is, as a matter of course, excluded is the one of emphatic comparison which underlies the type *grass-green*. Syntactically the relations would be rendered by various prepositions.

The pronoun *all*, in literary usage, may qualify an adj with the meaning 'wholly, altogether, infinitely', as in a l l - a b l e, *all-holy, -bitter, -black, -content, -complete, -fair, -glorious, -just, -merciful*.

The type goes back to OE. To this period belong *all-holy* and *almighty*. But most of the cbs now in use were coined after 1600.

Self-adaptive and *all-able* have level stress.

2. 23. 1.   Types ícy-cóld / deáf-múte / Ánglo-Nórman / Ánglo-Frénch[1]

Type i c y - c o l d 'cold in an icy way'. The first adj is the subjunct of the second. Exs are *red-hot, white-hot, red-ripe* 'fully ripe', *worldly-wise, lukewarm*. Many cbs denote color, the first-word indicating the nuance, as in

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[1] Cp. Anna Granville Hatcher, Modern English Word-Formation and Neo-Latin. A study of the origins of English (French, Italian, German) copulative compounds. Johns Hopkins Press. Baltimore 1951.

dark-blue, dark brown, light blue, light green, blue-black, bluish-gray, reddish brown, whitish brown, whity-brown / *Roman-Catholic, Scotch-Irish, German-Jewish, German-, Irish-, Swedish-* etc. *American.*

2. 23. 2.   Type deaf-mute 'deaf and mute'. These additive (copulative) cpds are rare as far as set cpds are concerned. *Bitter-sweet, shabby-genteel* and *deaf-mute* are common, but other cbs are either formed ad hoc or individual coinages formed for stylistic purposes. Shakespeare has many, as *honest-true, heavy-thick, odd-even, proper-false, fortunate-unhappy, valiant-young.* Other cbs are *sweet-sick, real-unreal, haunting-strange, far-faint* (Thomas Wolfe), *noble-good* (Galsworthy). Technical cbs are numerous today: *phonetic-semantic, social-economic, allegoric-didactic, tonal-verbal* etc. (Hatcher 148).

With ethnic adjs, cbs are frequent. They denote mutual relation (treaty, war or otherwise), as *the Prussian-Austrian war, the German-Russian war, the Swedish-Danish relations* etc. Another use is represented by cbs like *an English-Greek dictionary* (always with *dictionary* as second element).

2. 23. 3.   The types *Anglo-Norman* and *Anglo-French* are parallel to the two preceding types, differing from them in that they are coined on a Neo-Latin basis.

The type Anglo-Norman ('pert. to the Normans or their language in England') represents subordinative cpds, the first-word being the subjunct of the second-word: *Anglo-French (-Latin), Indo-European, Indo-Chinese, Anglo-Danish* 'pert. to the Danes in England', *Anglo-Indian* and other ethnic names (reference is chiefly to language or descent) are the only representative group, though some of the cbs of the *concavo-convex* type below may be analysed as subordinative cpds, too.

2. 23. 4.   Type Anglo-French 'English and French, pertaining jointly to the English and French'.

Additive relation is the most frequent. However, the exact relation is often understood from the context only. Exs of ethnic cbs are *Anglo-American (-French, -German, -Russian* etc., etc.) treaty, agreement, relations or the like. Other possible first-words are *Franco-, Graeco-, Russo-, Sino-, Turko-, Gallo-, Indo-.*

Scientific nomenclature makes extensive use of the type to denote various relations based on the general notion of two elements combined, as in *concavo-convex, concavo-concave, plano-concave, politico-economical.* Cbs are possible ad libitum, first-words may be given: *convexo-, oblongo-, historico-, serio-, dramatico-, economico-, plano-.*

The latinizing types are now more or less avoided, except in strictly scholarly (geographical, ethnological, linguistic) parlance. With the idea of 'international relations' the *-o* form still seems to be predominant, but here also the tendency is probably in favor of the native type, especially when minor international problems are concerned (for an attempt at a description of the various tendencies today see Hatcher 153—159).

2. 23. 5.   The word-order in subordinative cpds is clear: the second-word is the basic part which is modified by the first-word. It would not be possible to change the word order of *Anglo-Norman,* as in *Anglo-Norman* language, without changing the meaning of the cb. With cbs of the additive type the case is different. The logical connection would not have been different if the

word-order in *Anglo-French* were inverted. The preference given to *Anglo-* as first-word is not due to logical necessity. On the other hand, first-words in *-o* of ethnic names are restricted. *America-, Germano-,* for instance, are hardly used, nor does a latinizing first-word exist for *Japanese,* so *Japanese* will always have the role of a second-word, while the notion 'English' always comes first in the first-word *Anglo-,* even when an *-o* form of the second-word exists (as in *Anglo-Russian war*).

For the native-coined cbs, word order is partly determined by psychological factors, the predominant element being named first. This will be the reason for the word-order in *German-Russian war* (as Germany started the war). In cbs of the type *an English-Greek dictionary* the word-order is not free: the language forming the basis, i.e. the language which is translated, comes first.

All cbs have level stress (with the exception of the word *bitter-sweet* which has forestress).

2. 23. 6.   Both *Anglo-Norman* and *Anglo-French* go back to Latin ethnic adjs of the type *Gallo-Graecus* 'Gaul of Greece' (itself influenced by the Greek type *Syro-Phoinix* 'Phoenician of Syria'). This type was newly started in Modern Latin and has given rise to corresponding types in the modern vernacular languages. The determinative ethnic type is quite infrequent in English before the mid-eighteenth century (Hatcher 152), the earliest instances being *Gallo-Greek* 1601 and *Anglo-Saxon* 1610 (Hatcher 198, f. 60). The additive Neo-Latin type (*Gallo-Belgicus* 'Gallic and Belgic') arose from the determinative one. The originally ethnic pattern assumed an extension of reference at the hands of 16th c. lexicographers by whom it was used in coinages of the type *Lexicon Graeco-Latinum.* The next step was the extension of reference to bilingual texts in general where the additive idea suggested itself predominantly. As for non-ethnic adjs of the type *concavo-convex* (see 2. 23. 4), Miss Hatcher assumes influence of the Renaissance word *comico-tragicus,* itself based on Plautus' *tragicomoedia* (see Hatcher p. 70 and p. 133 ff.).

In English, the additive type *Anglo-French* does not occur before the 19th c., the chief period of productivity being the second half of the century, but in Italian and French, the type is older (see Hatcher 151). It is with technical-scientific adjs that additive cbs start in Modern Latin and, under its influence, in the modern vernacular languages. English instances are *theologico-moral* 1644, *historico-cabbalistical* 1652, *physico-mechanical* 1661 and many more (see Hatcher 133). Almost at the same time, coinages begin to be made on a native basis (type *phonetic-semantic,* see 2. 23. 2). The first cbs occur, though only sporadically, in the second half of the 17th c. (chiefly terms of natural sciences), as *plane-convex* 1668, *medical-physical* 1684. A few more were coined in the 18th c., but the type is not really productive before 1800, and even then the *-o* type remains stronger. Towards the end of the 19th c., adjs from other than the natural sciences occur (social and economic sciences etc.), as *animal-human* 1884, *divine-human* 1892, *social-political* 1884 (see Hatcher 146—148). As for the 'dictionary' type (see 2. 23. 2), I find *English-German Dictionaries* attested for 1740 in OED, so this type cannot have sprung form the latinizing type *Anglo-French,* as Miss Hatcher says (156), but is probably the result of combinations of the type *phonetic-semantic.*

The native additive type *deaf-mute* is apparently also partly influenced by the Neo-Latin type *Anglo-French*. With cbs of anglicized Latin words of the type *phonetic-semantic* the case looks pretty clear. But modern literary and poetic usage may be a spontaneous rise as well as Shakespeare's use of the type (by Miss Hatcher ascribed to imitation of the OGr type *glykýpikros*). Inspiration from a scientific type does not look plausible. At any rate, the type has never been common. The oldest word, *bittersweet* 1386, is formed after the just mentioned Greek word. Apart from this word and Shakespeare's coinages, all cbs date from the 19th c. or later.

The type *icy-cold* does not seem to be older than LME, the earliest cbs I have found being *red-hot* 1375, *lukewarm* 1398, *wordly-wise* c 1400, *light-green* 1420. The *dark-* cbs arise in the 18th c. (see OED *dark* a. 3 c).

2. 24.   Types hèárt-brèáking / scáfàring

form compound participial adjs with a vb/object or vb/subjunct (adverbial complement) as an underlying theme (for analysis see 2. 1. 4). The types are essentially MoE, with occasional older words such as *wayfaring* OE (now arch.), *seafaring* 1200, *wind-waving* 1300 (next inst. 1848, poet.). Old English knew a literary type *lond-būend* which was, however, almost exclusively used for the formation of agent sbs. They were chiefly translations of Latin words such as *terricola, agricola* and did not "live longer than down to the 13th c." (Kärre 232)[1].

The type h e a r t - b r e a k i n g is the stronger of the two. Cbs are practically unlimited. Exs are *heart-piercing, heart-rending, breath-taking, awe-inspiring, freedom-loving, fact-fronting, degree-conferring, earth-shaking, God-fearing, life-giving, mind-filling, soul-stirring, soul-sickening* etc., etc.

The word *painstaking* is exceptional in that the first-word has the plural form; on the other hand, *pains* is often construed as a singular.

The type s e a - f a r i n g forms cpds based on the relation 'predicate plus adverbial complement' (chiefly one of place, rarely of time, but also a few others). Exs are *wayfaring, seafaring, sea-going, ocean-going, picture-going, sea-roving, earth-wandering, glass-gazing* (Sh) 'preening oneself in a mirror' / *night-blooming, summer-flowering, day-flying* / *law-abiding* / *Axis-sympathizing*.

The stress pattern is ⌐/⌐ though occasionally some speaker will pronounce the word *heart-breaking* with double stress. The stress is then influenced by emotion. The same emotive stressing may be heard in the pronunciation of the corresponding G word (*herzzerreißend*), but the majority of speakers will avoid it.

Note: In this connection it is interesting to note that the corresponding German type *herzzerreißend* is a syntactic group. Cp. such groups as *seine leises Grauen erregende Gestalt, einen das ganze Haus aus dem Schlummer reißenden Auftritt* etc. The stress pattern is not affected thereby, the ptc is always weakly stressed.

2. 25.   Types áll-beáring / sélf-ádvertising

The first-word is a pronoun in the types *all-bearing* and *self-advertising*. Exs of cbs, which are based on a predicate/object relation, are *all-affecting,*

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[1] K. H. Kärre, Nomina agentis in Old English. Diss. Uppsala 1915 (Uppsala univ. årsskr. 1915).

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-arranging, -binding, -blessing, -destroying, -embracing, -pervading, -tolerating etc.
These cbs have a literary or poetical character. The cpd *all-wielding* is OE,
but otherwise "no examples of this combination occur much before 1600" (OED).

Exs of cbs with *self-* are *self-boasting, -destroying, -giving, -knowing, -killing,
-pleasing* a.o., all having a literary character. The type is MoE.

With *self-* we have, however, a stronger type based on a subject/predicate
relation, as in *self-loading* (gun). These cbs are 19th c. and later and all tech-
nical terms, applied to devices, apparatuses, *self-* having the meaning 'auto-
matically'. Exs are *self-adjusting, -charging, -closing, -filling, -inking, -register-
ing, -propelling* etc., etc.

In *well-meaning, well-wishing, ill-boding, ill-willing* and occasional other cbs
(see OED) we also have a predicate/object relation, the first-words having the
function of primaries.

2. 26. Type eásy-góing

Cbs of this type are made up of a first participle determined by an adj (for
the analysis see 2. 1. 4). In Old English there existed a few poetic cbs such as
cwic-lifigende, dēop-hycgende, hēah-sittende which obviously did not represent
a current pattern (Carr does not treat the type). In Late Middle English we
meet with occasional coinings such as *far-casting* 'cunning' 1387, *hyghe strow-
tyng* 'highswelling' 1398, but the type grows common in MoE only. We include
cbs with *well, ill*, and *far* which have at all times been both adjs and advs.

Good- (*fine-, nice-, odd-* etc.) *looking, hard-working, high-flying, high-sounding,
sweet* (*-strange* etc.) *-smelling, quick-cooking, wide-spreading, far-reaching, far-
seeing, well-sounding, ill-faring, ill-judging* a.o.

2. 27. 1. Type mán-máde

A second participle is determined by a sb. Though the type has been alive
since the OE period (cf. e.g. *handworht, goldhroden*), the type is somewhat rare
in Germanic languages (see Carr 205—209). The corresponding German type is
late (see Carr 206) and very weak (see Henzen 67). Its productivity has been
most in evidence in the MoE period, esp. since the 19th c. Most words, for
instance, with the first-words *earth, god, man, iron*, and, quite naturally,
machine date from the 19th c., while *woe-* words were frequent in 17th and
18th c. literature (see OED s.v. *woe*).

No PE word seems to be older than ME (*hand-wrought* c 1000, next 1881 is
obviously a revival). Exs are *moss-grown* 1300, *woe-begone* 13.. (*woe-beseen*
1390, *woe-bested* 1470), *moth-eaten* 1377, *wind-driven* 1387, *worm-eaten* 1398,
iron-branded 1400, *book-learned* 1420. More recent are *frost-bitten, hunger-bitten,
wind-bound, wind-shaken, storm-beaten, tongue-tied, god-made, home-bred, home-
born, homespun, heaven-born, hidebound* (16th c.), *god-begotten, god-inspired,
god-forbidden, awestruck, sun-baked, sun-dried, earthbound, hand-made* (17th
c.), *spellbound, skinbound, wayworn, heartfelt* (18th c.), *conscience-stricken*
1819, *horror-stricken* 1805, *poverty-stricken* (Dickens) 1844, *god-forsaken* 1856.
Cbs are practically unlimited today, especially as technical terms. A few
instances of quite recent cbs are *factory packed, war-battered, government
owned, seaborne, airborne, carrierborne, communist infiltrated*.

Participial cpd adjs are chiefly based on a passive verbal nexus. The most frequent underlying concept is that of the passive participle determined by a converted subject (as in *man-made* 'made by man'). It is the regular concept underlying cbs with *all-* and *self-*. But there are also other verbal nexus relations. The determinant may be a subjunct, standing to the pt in the syntactic relation of an adverbial complement.

Instrumental relation underlies *moss-grown* and *star-spangled*, but *iron-clad* is 'clad in iron', *diamond-cut* may be 'cut into the shape of a d.' or 'cut with facets like a d.'. Similar is *table-cut* (said of a diamond) 'cut in the form of a table', *custom-built* AE, *custom-made* AE mean 'built, made to the customer's order'. Is *death-doomed* 'doomed to d.' or 'by d.'? *Shard-torn* is 'torn to shards', *safety tested* is 'tested for safety'.

2. 27. 2.   A somewhat larger group is represented by the type word h o m e - b r e d where the underlying notion is that of place. Exs are *home-made, home-spun, hill-born, world-renowned, heart-felt, heaven-born, home-born, sea-born, London-trained*.

2. 27. 3.   There is a small group of cpds characterized by the type word c r é s t - f à l l e n, prob. to be analysed as 'with the crest fallen'. I have no exs earlier than the close of the 16th c.: *crest-fallen, chap-fallen = chop-fallen, jaw-fallen, heart-broken, tip-tilted*, obs. *trade-fallen* 'bankrupt', *oil-dried* (lamp, Sh), *hip-shot* 'having the hip shot, i.e. out of joint'.

The second-word of *bed-ridden* is orig. not a ptc, but a ME extension of OE *rida* 'rider'. It was analysed as 'confined to bed, at the mercy of the bed, dominated, governed by the bed' and has attracted *priest-ridden, class-ridden, germ-ridden* a.o.

2. 28. 1.   Types áll-abhórred / sélf-bórn

Participles may also be determined by the pronouns *all* and *self*. The pronouns function as converted subjects.

a l l - a b h o r r e d, *all-admired, all-dreaded*. The type is much weaker than type *all-bearing* and, according to OED, rare before Shakespeare.

s e l f - b o r n 1587 (the earliest quotation in OED), *self-abased, self-appointed, self-elected, self-governed, self-made, self-possessed, self-taught* a.o.

2. 28. 2.   The basic stress pattern $\acute{-}/\acute{-}$ is regular only with *all-* and *self-* cbs. Many cbs of the type *man-made* are, however, always heard with forestress (e.g. *moth-eaten, spellbound, frost-bitten* / *homespun, heart-felt, heart-broken*). For the speech-feeling they have obviously syncretized to a higher degree than e.g. *home-made, home-bred, custom-built, government-owned, factory-packed* which have more of an ad hoc character and therefore show the double-stress pattern (in predicative position). Cpds of the type *crest-fallen* always have forestress.

2. 29. 1.   Type hígh-bórn

Historically speaking, the type *high-born* combines several older syntactic types: 1) the first-word is historically an adverb, as in *new-born*; 2) the first-word is historically an adj used as subjunct, as in *fresh-clad*; 3) the first-word

is historically an adj used as a predicate complement, as in *dead-born*. OE adjs formed their adverbs in -*e* (*heard/hearde, dēop/dēope*). But adverbs were not distinct from the adjs when the adj ended in -*e* (*clǣne, dēore* are both adj and adv), and there were others, as *hēah* 'high' which were adjs as well as advs. The loss of adverbial -*e* in ME obliterated all distinction between adjs and advs. This fusion of various morphological types paved the way for the establishing of a derivative pattern. For several centuries back, English has had a type of adjective compound consisting of a second participle determined by an adj, which is the only fact relevant to synchronic analysis. The underlying concept may often defy an undisputed analysis, a fact we have observed with other cpd types, too. In *high-born, low-born* the first-words may be considered as predicatives or as subjuncts, and similar difficulties arise for other cbs.

The oldest examples which are in use today date from the ME period: *new-born* 1300, *new-clad* 1300, *high-born* 1300 (but the next quotation in OED is from 1728), *dead-born* 1330, *free-born* 1340, *new-sown* 1375, *hard-set* 1387, *high-set* 1382 (next quotation from 1631). But the formative power of the wf type does not really start before the second half of the 16th c., and most present-day cpds are much more recent.

Clean-cut, clean shaven, deep cut, deep drawn, deep read, deep seated, deep set, far gone, far fetched, foreign built, fresh clad, fresh oiled, high set, high strung, low bred, modern built, new found, new laid, still born, true born, widespread, ready made.

2. 29. 2.   Most of the cpds whose second-word is a second ptc have a passive meaning. This is practically the rule with transitive verbs. Exs of cbs with ptcs of transitive vbs that have an active meaning are few in number. One group are cbs with *spoken* for a second-word, the earliest recorded (of the whole group) being *fair-spoken* and *well-spoken* (1460), followed by *broad-, civil-, free-, plain-, out-, short-, soft-*. Other cbs are *well-read, best-read* (*read* alone, first recorded 1586, is no longer in use), *well-behaved, better behaved* (the OED has one quotation for *behaved* alone; as a transitive vb, *behave* is extinct now), *hard-bitten* 'given to hard biting'. Though the word is no cpd, we may mention *learned* here. In OE and ME the vb *learn* had the meaning 'teach', so *learned* is orig. 'taught, instructed', but was subsequently apprehended as the ptc of *learn* in present-day meaning and attracted *studied* (1530) and perh. also *read* (see above). Cp. also G *ein gelernter Arbeiter, ein studierter Mann, ein belesener Mensch*. Other exs are *far gone, new come, high flown*.

Second participles of intransitive vbs occur as early as OE. The only cb that has come down to our day is *new-come*. The other cbs used today are MoE: *high-flown, crest-* (*jaw-, chap-, chop-*) *fallen, well-traveled, far-traveled, untraveled* (*traveled* is first recorded 1413), *well-judged*, its opposite *ill-judged*. In recent American journalese we find cbs such as *star-turned, debutante-turned*. We have, however, ME cbs with locative particles for a first-word, such as *by-gone, by-past*, while *ingrown* is rec. from the 17th c. For the present-day speech-feeling *short-lived* and *long-lived* belong in the group, though, historically, the second-word is *life* plus -*ed*, with the voiceless fricative voiced (therefore still often pronounced [laɪvd], see Jesp. VI. 24. 12 and Linguistica 378f.).

COMPOUND AND PSEUDO-COMPOUND VERBS

Introductory remarks about compound verbs

2.30. Compounds are morphological units consisting of independent morphemes, i.e. words (such as *rainbow, colorblind*). Such combinations are necessarily based on a determinant/determinatum relationship: *rain* determines *bow*, as *color* determines *blind*. I have discussed elsewhere the question of nominal compounds[1]. If now we look for verbal compounds, applying the criterion just stated, it will be clear from the outset that the only type of verbal compounds fitting the description are verbs with a locative particle for a determinant (as *overdo, outstare, underestimate*). Not all locative particles form verbs. Those which have derivative force are *over, under*, and *out*. We will give a description of these types first.

2.31.1. out-

With a locative meaning, the particle has never had any derivative force. Verbs of the type o u t b r e a k 'break out' occur only in poetry and are equivalent to prose combinations of the phrasal type *break out*. Such compounds as *outbear, outburn, outride, outroll, outstretch, outspread, outthrow* therefore are not relevant to the derivative system.

2.31.2. It is with verbs of the type o u t b i d 'bid more than (another person)' that the particle has become productive. The type obviously originated in situations where an encounter took place and where one of the participants was put 'out' of competition. A competitive element is usually involved so that most verbs are analysable as 'outdo in -ing'. There are a few cases where the non-competitive idea of 'surpassing a person in some reciprocal action' is expressed, as in *outlive* 'live longer than', *outgrow* 'grow faster than (another person)', *outstay* 'stay longer than', but these verbs form a minority.

2.31.3. The first combinations occur in the second half of the 15th century: *outlive* 1472, *outproffer* 'outbid' 1494 (obsolete). The type slowly grows in the 16th century and is fully developed about 1600. *Outcry, outface, outgo, outride, outrun, outshoot* are recorded from the first decades of the 16th century, while the second half of the same century is instanced by such coinages as *outbid, outbrag, outbrave, outdare, outgrow, outlast, outlook, outreach, outshine, outstare*. 17th c. words are *outbabble, outblush, outdo, outdrive, outfight, outlaugh, outmarch, outmatch, outsail, outsell, outshrill, outsing, outstride, outtravel, outwalk, outwatch, outwork, outwrite*. More recent are *outargue, outblaze, outburn, outdazzle, outmaneuver* (18th c.), *outstrip* 'outdo in stripping' 1868.

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[1] See 2.1.

2. 31. 4.   Denominal verbs, chiefly coined after 1600, have the meaning 'exceed, excel, surpass with regard to (the characteristic attributes of) . . .', as outnumber, *outrival, outvote, outwit* (17th c.), *outgeneral, outjockey* (18th c.), *outclass, outdistance, outrange, out-Yankee* DA (19th c.).

We have a semantic variant of the type in the military terms *outwing* 1648 and *outflank* 1765.

2. 31. 5.   Of deadjectival verbs, only outsmart (coll. AE, not in OED, Spl., DAE, DA) is common, while 17th c. coinages such as *outactive, outblack, out-swift* were shortlived.

2. 31. 6.   Shakespeare's it out-Herods Herod (Hamlet 3. 2. 16) gave rise to a few imitations in the 17th c. (Fuller) and in the 18th (Swift). But it was in the 19th c. that such combinations were "used almost without limit" (OED s.v. *out-* in comb.). They have a literary character.

2. 31. 7.   In a few verbs governing an object of the thing we have the meaning '. . . beyond the end of (what is denoted by the object)', as in outwear (clothes) 1541, *outgrow* (clothes, habits, opinions) 1665, *outsit* (time) 1658, *outsleep* (time) 1530, *outstay* (time, patience, welcome, an invitation) 1600 but the common word for the latter is *overstay*.

2. 32. 1.   over-

As far back as Old English *over-* was an 'inseparable prefix' with many verbs, as Harrison's material[1] shows. Semantically, we can distinguish several groups in PE usage. Verbs of the type overshadow imply the meaning 'perform the action so as to cover (what is denoted by the object of the verb)'. The group goes back to Old English. Examples are *overbridge, overflow, overgild, overshadow, overshine, oversow, overswim, overspread* (OE), *overcover, overfold, overgrow, overlay, overlie, overstride* (ME), *overcloud, overfilm, overfly, overglide, overshroud, overspan, oversprinkle, overstrew, overswarm* (16th c.), *overfloat, overflutter, overmask, oversnow, overstream, oversweep, overwrite* (17th c.), *overfleece, overgloom* (18th c.), *overflood, overnet, overroof, oversmoke, overwrap* (19th c.). In Modern English use, the type belongs to elevated literary or poetic language.

In *overhear, oversee* (OE), *overlook* 1369, *overpeer* 1583, *overlisten* 1609 we have a figurative semantic variant of 'covering'.

2. 32. 2.   The type override 'ride over, overhead, beyond' has formed *overcome, overleap, override, overrun, overstep* (OE), *overstride* 1200, *overpass* 1297, *overblow* 1385, *overspring* 1386, *overjump* 1608. Already in Old English, such verbs frequently connoted the idea of 'disturbed equilibrium, defeating, crushing', originally both in a material and a figurative sense. In Modern English, the latter meaning is predominant. The type is instanced by *overcome, overwin* 'conquer' (obs. or dial.), *overrun* (OE), *overmaster* 1340, *oversail* (sense now obsolete) 1449, *overawe, overbear, overpower, overrule, overtop, overtrample, overwhelm* (16th c.), *overpersuade* 1624, *overtower* 1831, all with the basic meaning 'overpower, defeat, dominate, prevail over'.

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[1] T. P. Harrison, *The separable prefixes in Anglo-Saxon*. Baltimore diss. 1892.

2. 32. 3. Another aspect of the idea 'disturbed equilibrium' is the sense 'upset' which is no longer productive but which has formed a number of verbs, as o v e r t h r o w, *overset, overtumble, overturn, overwhelm* (all 14th c. in this sense), *overtopple, overblow* (16th c. in this sense).

2. 32. 4. A small group of verbs convey the (now only figurative or poetic) meaning 'over the brim or edge', as o v e r f l o w OE, *overboil, overbrim* (17th c. in this sense), *overbubble, overburst, overwell* (19th c.).

A semantic variant of the type *override* is the type o v e r r e a c h '. . . beyond a certain point, limit etc.' which proved only a little stronger than the competing type *outlive*. It has coined such verbs as *overreach* 1300, *overstretch* 1330, *overrise* 1350 (now rare), *overshoot* 1369, and the only verb which is now common, *overstay* 1646, in use with a personal object *overlive* 'live longer than' OE (now rare and arch.).

2. 32. 5. *Over-* has unsuccessfully rivaled *out-* in combinations of the type *overbid* 'outbid, surpass a person in -ing'. Examples are *overleap* 1340 (obs.), *overrun* 1400 (now rare), *overshine* 1588 (in this sense), *overdo* 1625 (in this sense), *overbid* 1645, all rare or archaic. We also find denominal coinages, all nonce-words such as *overbulk* 1606, *over-multitude* 1634, *over-Macpherson* (*Macpherson*) 1826 (see OED *over* 22).

2. 32. 6. The particle has achieved its real productivity with the type o v e r d o 'do beyond the proper limit, to excess'. Examples are *overdo, overdrink* (OE), *overcharge, overheat, overlade, overpraise, overrun, oversleep* (ME) and numerous later words such as *overbend, overbid, overcount, overcram, overeat, overfeed, overlift, overload, overcharge, overpay, overplay.* "By 1600 it had become allowable to prefix *over-* to any vb whose sense admitted of it" (OED *over* 27).

Overtake 1225 is unexplained. It may originally have been used of a falcon or other bird of pray chasing a quarry and finally 'over-taking' it. Formatively then, the verb would belong to the type *overshadow*.

2. 33. 1. under-

With a locative meaning, the particle was an inseparable preverb as early as Old English, though most of the coinings were imitations of Latin *sub-* verbs. This latinizing practice also prevails in the earlier Wycliffite version of the Bible. With verbs of general currency, however, *under-* has never become productive so that present usage knows only a very few combinations of which several are no longer analysable as compounds.

2. 33. 2. Patterned on Latin verbs were, for example, OE *underberan* 'supportare', *undercuman* 'subvenire', *undercreep* 'subrepere' 1440—1642, *understrew* 'substernere' 1382—1589. *Underwrite* also (rec. 1430), now only used with a specialized meaning, was coined as a rendering of L *subscribere*. It attracted *undersign* 1580, now not used as a full verb. A locative meaning must originally have underlain *understand* OE and *undertake* (rec. about 1200 as a replacement of earlier *underniman*). While *underwrite, undersign*, and several of the latinizing coinages were an attempt to establish the semantic pattern '. . . below or beneath what is denoted by the object of the verb', the only full verbs

commonly used are u n d e r l i n e 1721 and *underscore* 1771. Technical terms of the same type are *underrun* 1547 and *underdrain* 1805. A figurative variant of the pattern is u n d e r l i e, in its current meaning recorded only since about 1860, a semantic development of the verb as a geological term (about 1600, used of strata). Formally, the verb is Old English where it meant 'be subject to'.

2. 33. 3.   An arrested group is the one meaning 'destroy', instanced by *undergo* in the obs. sense 'undermine' 1000—1642, *undermine* 13.., *undercut* 1382, *underwork* (now obs. in this sense) 1504—1659, *undercreep* 'subvert' 1592—1623. Its positive counterpart, the 'support' group, has proved stronger, though chiefly in the formation of technical terms. The oldest meaning of *underlay* OE is 'support'. The following verbs joined it later: *underset* 1220, *undershore* 'prop up' 1399, *underprop* 1513, *underpin* 1522 (this is the only verb of the group which is now also used in general parlance), *undergird* 1526, *underbuild* 1610, *underarch* 1611, *underfloor* 1778, *underdraw* 1843.

2. 33. 4.   The foregoing description shows that the derivative yield of *under*-with a locative meaning has been so slight as to be non-relevant to word-formation as a grammatical category. The picture is quite different with the type u n d e r b i d '... below a fixed norm, below standard, at a lower rate than, at too low a rate'. This derivative pattern does not seem to be older than the close of the 16th century. It is probably patterned on its older counterpart *overdo*, but it is less productive than it. Examples are *underbid* 1593, *undervalue* 1596, *underdo*, *undersell*, *underrate*, *underact*, *underwork* (17th c.). More recent are *understate*, *underestimate*, *underbuy*, *underexpose*, *underpay*, *undercapitalize*, *underquote*, *undertrump* (card playing term), *undershoot*. Some verbs are represented by second participles only, as *underclad*, *underbred*, *underfed*, *undernourished*, *underpopulated*, *undercooled*.

Introductory remarks about pseudo-compound verbs

2. 34. 1.   While verbs formed with preparticles are compounds insofar as they consist of two independent words, formally speaking, we note that the particles do not behave like substantives, adjectives, and verbs as first elements of compounds. Full words ordinarily do not change semantically when they become constituents of compounds. The *head* of *headache* and the *rain* of *rainbow* have the same semantic features as *head* and *rain*. Derivatively productive verbal particles, however, are not used with any of the meanings the particles have as independent adverbs. Independent *over* does not mean 'excessively' as does the particle in *overrate*, *overdo*; *under* is not used in the sense of 'below standard, insufficiently' which the preverb conveys in *underpay*, *underestimate*. This attitude of the language towards full words as preverbs is probably one of the reasons why the types *underline* and *overcloud*, where the particle has a locative meaning (weakened as it is), have long ceased to be productive. Another reason is that locative adverbs had come to be placed after the verb[1]. Even the weakened locative meaning of the preceding types

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[1] G. O. Curme, *The development of verbal compounds in Germanic*. Paul and Braune's Beiträge 39 (1914) 320—361. See below 3. 1. 4—5.

seems to have made the particle undesirable for verbal composition. Such a reducing of the full word value brings the locative particles nearer to prefixes with which they also have the stress pattern in common. While particles as well as prefixes have full stress, phonemically speaking, the most frequently occurring variant is that of middle stress: *òut-dó* is stressed like *ùn-dó*[1].

2. 34. 2. With the exception of verbs with preposed particles, verbal composition did not occur in Old English and does not seem to have existed in Germanic at all. Wilmanns[2] has a very few isolated instances from Old High German and one from Gothic for verbs with a substantive for a first-word. Of adjectives, OHG *volle* 'full' (127—128) formed verbal compounds (the type is dead in Modern High German), but the case of *eben* (128) is doubtful, as compounds of the type may have been influenced by Latin *co-* verbs. Verbal composition does not exist in present-day English either, though such verbs as *spotlight, blacklist, stagemanage* seem to contradict us. There is a basic difference between prefixal and preparticle verbs like *undo, overdo* on the one hand and composite verbs of the just mentioned kind on the other, as we have already pointed out. While *un-do, over-do* are analysable as determinant/determinatum groups, verbs of the *spotlight* type are essentially verbs with a zero determinatum, the determinant being the full underlying basis: *to spotlight* is '(to turn) the spotlights on . . .', *to stagemanage* is '(to act like a) stagemanager' and so forth. Considering this we have to say that composite verbs other than preparticle verbs are actually derivatives from nominal composites.

2. 35. 1. Two main groups of verbal pseudo-compounds occur:

A: the verb is derived from a nominal compound (which is almost always a substantive). 1) the type *spotlight* (sb/sb); 2) the type *blacklist* (adj/sb), also occurring as a syntactic group of the type *cold shoulder*. For minor types see below.

B: the verb is derived from a synthetic compound, either 1) an agent noun, as in the type *stage-manage* from *stage-manager*, or 2) an 'action noun', as in the type *playact* from *playacting*, or 3) a participial adjective, as in the type *spoonfeed* from *spoonfed*, resp. *new-create* f. *new-created*.

2. 35. 2. This latter process is often called backformation. It is distinguished from the A group only by the dropping of the functional morpheme of the basis and by the morphologically important fact that the second element is verbal. But essentially we have derivation from a composite basis in both groups, and it therefore matters very little that in some cases we cannot exactly tell what the basis is: the verb *firehunt* may go back either to *firehunting* sb or *firehunt* sb, *roughcast* may be derived either from *rough cast* sb or from the participial adjective *rough cast*.

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[1] See 3. 1. 16—18.
[2] W. Wilmanns, *Deutsche Grammatik* (Alt-, Mittel- und Neuhochdeutsch). Zweite Abteilung. Wortbildung. Second edition. Berlin and Leipzig 1930, pp. 121—122.

2. 35. 3.   All the verbs listed below I have found recorded or have heard in characteristic forms, as *we dryfarm, to topdress*, where the help of nominal forms is excluded. Participles like *waterlogged, double-dyed*, or substantival *ringbarking, dryfarming* which are based on nominal word-formation types of old standing would not prove the existence of the verb. For this reason I have excluded several words for which dictionary records have nominal forms only (as *crabsidle, double-bitt* OED).

2. 35. 4.   Derivation of verbs from compound substantives is old in the Germanic languages. Gothic as well as Old High German and Old English know such derivatives, although the type is comparatively weak in all three[1]. A treatment of the subject in English does not seem to exist. Two works dealing with derivation by a zero morpheme[2] do not treat of derivation from composites, perhaps because the authors did not realize that pseudo-compound verbs should fall under 'conversion' or 'functional change'. My lists are based on a systematic compilation from the Shorter Oxford English Dictionary and the Dictionary of Americanisms, on additional searches in the Oxford English Dictionary, on material collected in personal reading and words overheard in the spoken language. The purpose of this chapter is chiefly to give a structural description of the types, not a description of 'good' usage. However, some questions of usage will be discussed below.

2. 36.   Types spótlight / blácklìst / còld-shoúlder

2. 36. 1.   Let us first examine the *A* group. As the list shows, there is hardly any derivation before about 1550, very little in the 17th and 18th centuries, while we observe an enormous productivity in the 19th century which is continued in our time. The great role American English plays in the development of the types is evidenced by the large number of combinations (based on the Dictionary of Americanisms) first found in U.S., all 19th and 20th century words. Though the type is Old English, on principle, there appears to be a break in the development, Very few OE words seem to have survived into the Middle English period. OE examples are *edlēanian* 'requite' from *edlēan* 'reward', *dǣdbētan* 'repent, atone' from *dǣdbōt* 'repentance, reparation', *mānswerian* 'swear falsely' from *mānswaru* 'perjury', *gemundbyrdan* 'protect' from *mundbyrd* 'protector', *gōdspellian* 'preach the gospel' from *gōdspell* 'gospel', *ūtlagian* 'outlaw' from *ūtlaga*, *wilcumian* 'call "welcome guest"', welcome' from *wil-cuma* (lit.) 'pleasure-comer, welcome guest'. A case of deadjectival derivation is *ārweorðian* 'honor' from *ārweorð* 'honorable'. Of the preceding words, *outlaw* and *welcome* have survived to the present day but *welcome* is no longer analysable as a compound. A Middle English coinage now obsolete is *wanhope* 'despair' (1300—1425) from *wanhope*. *Trothplight* 'plight one's troth to engage in order to marry' c 1440 from *trothplight* sb is archaic now. We may add *safeguard* 1494 (sb 1421).

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[1] For Gothic and Old High German see W. Wilmanns, op. cit. 119—121.
[2] Y. M. Biese, *Origin and Development of conversions in English.* Annales Academiae Scientiarum Fennicae. B XLV. 2. Helsinki 1941. — D. W. Lee, *Functional change in early English.* Menasha, Wis., G. Banta Pub. Co. 1948.

2. 36. 2.   The following verbs are recorded in the 16th century: *weatherboard* 1535, *nickname* 1536, *roughcast* 1565, *drynurse* 1581, *shipwreck* 1589, *whitewash* 1591, *football* 1599. The verb *safe-conduct* was in use for some time (1564—1639, sb 1297).

In the 17th century we find *elbow* 1605, *earmark* 1641, *footmark* 1641, *shoehorn* 1650, *dovetail* 1657, *dead color* 1668, *pickpocket* 1673, *hamstring* 1675, *snowball* 1684, *tiptoe* 1661, obs. *side-box* 1689.

From the 18th century are *handcuff* 1720, *iron-mould* 1727, *footpad* 1735, *trenchplow* 1738, *ringfence* 1769, *honeycomb* 1774, *sidesaddle* 1778, *wetnurse* 1784, *outline* 1790, *sweetheart* 1798.

2. 36. 3.   The nineteenth century is represented by such verbs as *skylark* 1809, *loophole* 1810, *honeymoon* 1821, *double-shot* (military term; 1824), *blackbook* 1828, *buttonhole* 1828, *spread-eagle* 1829, *jogtrot* 1837, *pitchfork* 1837, *sideline* 1837 (American English in OED Suppl.), *outfit* 1840, *soft-soap* 1840, *waterproof* 1841, *cold-shoulder* 1845, *sandpaper* 1846, *rough-board* 1849, *footprint* 1850, *fantail* 1851, *hallmark* 1852, *butt-end* 'knockdown' 1859, *courtmartial* 1859, *sandbag* 1860, *pigeonhole* 1861, *footnote* 1864, *watermark* 1866, *fireproof* 1867, *leapfrog* 1872, *roller-skate* 1874, *butterfly* 1875, *roughdraft* 1879, *blackmail* 1880, *deadlock* 1880, *snowshoe* 1880, *blacklist* 1884, *daydream* 1884, *dry-dock* 1884, *hero-worship* 1884, *fair-copy* 1885, *sideslip* 1887, *nursery-maid* 1899, *pinprick* 1899.

More recent are *side-glance* 1901, *side-step* 1901, *week-end* 1901, *free-wheel* 1903, *double-cross* 1904, *streamline* 1913, *upgrade* 1920, *wisecrack* 1924, *soft-pedal* 1926, *spotlight* 1926. The actual trend, however, is more truly illustrated by the list of American English examples. The following list of verbs first recorded in this country is based chiefly on the DA:

2. 36. 4.   *Clapboard* 'cover with clapboards' 1637, *cowskin* 'whip with a c.' 1799, *jackknife* 1806, *firehunt* 1814, *brickbat* 1833, *war-whoop* 1837, *bulldog* 'attack like a b.' 1842, *crawfish* 'move backwards, move out of a position' 1842, *whipsaw* 'cut with a w., cheat' 1842, *sleighride* 1845, *deadhead* 1854, *flatboat* 1858, *railroad* 1858, *rawhide* 'whip with a r.' 1858, *double-quick* 1862, *horsefiddle* 1863, *tree-toad* 1866, *baseball* 1867, *double-track* 1867, *blacksnake* 'lash with a b. whip' 1870, *homestead* 'become a settler on a h. land' 1872, *groundsluice* 'wash down earth by means of sluices' 1875, *grubstake* 'supply with a g. = provisions given to a prospector as a stake in his findings' 1879, *backcap* 'depreciate' sl 1889, *sidetrack* 1880, *bobsled* 1883, *bushhammer* 'dress stone with a b.' 1884, *saddlebag* 1884, *backfire* 1886, *tenderfoot* 1886, *network* 1887, *bellyache* 'grumble' vulg. 1889, *scarehead* 'give a story a prominent headline' 1889, *skyrocket* 1889 (Cent. Dict. q. American Speech 18 (1943) 65), *singlefoot* 1890, *rubberneck* 1896.

Gold-brick 'swindle' sl 1902, *moonshine* 1902, *roughhouse* 1902, *pussyfoot* 1903, *shortchange* 1903, *strong-arm* 1903, *backtrack* 1904, *double-head* (railroad term) 1904, *blackjack* 'strike with a blackjack' 1905, *whitecap* 1908, *cakewalk* 1909, *gumshoe* 'sneak about in gumshoes' 1912, *headline* 1912, *joy-ride* 1915, *catfoot* 1916, *backstop* (baseball term) 1918, *fair-ground* (hunting term in the West) 1920, *foxtrot* 1921, *Jim Crow* 1923, *back number* 'treat as a back number' 1924, *backtrail* 1924, *highhat* 1926, *lipstick* 'paint the lips' 1926, *hightail* 1927,

southpaw (baseball term) 1928, *highpower* 1931, *highball* 1934, *double-furrow* 1938, *spearhead* 1938, (cited in ASp 18. 304, 1943), *snowplow* 1939, *pinpoint* 1945 (ASp 24. 226, 1949), *high-pressure* 1947, *snowshoe* 1947, *crosscheck* 1951 (ASp 29. 72, 1954). I have no first records for *rubber-stamp, sideslip, sideswipe, soundproof* (all in Webster 1955). In general reading I have come across such verbs as *butterfly-chase* (Gen. S.L.A. Marshall in New York Times Book Review Nov. 14, 1954, p. 3: *he butterfly-chased the illusion*), *horseback-ride* (T. S. Stribling, Unfinished Cathedral, Albatross ed. 101, publ. 1934: *Northern people . . . horseback-ride*), *high-card* (*the people . . . won't high-card him*, New York Times Magazine May 29, 1955, p. 63), *fingerprint* (twice in New York Times April 1, 1956). I have heard the verbs *roadtest, blueprint, safety-check*. The verb *downgrade* which is frequently heard, is not in dictionaries, while *upgrade* is recorded 1920 (OED Spl.).

2. 36. 5.   While derivatives from substantives of the *spotlight* and *blacklist* types form the majority, as we have pointed out before, the preceding list also instances a few other patterns. Of the type *joyride* (sb/deverbal sb) we have *sleighride, horseback-ride, crosscheck, spotcheck, firehunt, butterfly-chase, hero-worship, foxtrot, shipwreck, moonshine, sideslip*, with an adjectival first-word *whitewash, roughcast, wisecrack*. The type *leapfrog* (deverbal sb/sb) is represented by *whipsaw, scarehead, pitchfork. Outline* and *outfit* have a locative particle for a first element. To various other types belong *pickpocket, double-quick, tiptoe*, and *upend* 1823, according to OED originally a dialect word. Derivation from compound adjectives is almost non-existent. Only *-proof* words seem to occur, as *waterproof, fireproof, soundproof*.

2. 37.   Types stágemànage / pláyàct / spoónfeèd

2. 37. 1.   The picture of the B group is similar to that of the A group, though there are fewer words. The possible reasons for this we shall discuss later. We have few coinages before about 1550, some increase in productivity in the 17th century (esp. of the type *new-create*), infrequent new formations in the 18th century, an upsurge in the 19th and 20th centuries.

Middle English coinages are *blindfold* (orig. *blindfellen* (fell =) strike blind) a 1225, *backbite* c 1300 and the now obs. *hungerstarve* 1390—1610. The following verbs are first recorded in the 16th century: *rough-hew* 1530, *sunburn* 1530, *wayfare* (now rare and arch.) 1547, *tonguetie* 1557, *backslide* 1581, *wiredraw* 1598.

2. 37. 2.   The 17th century is represented by *double-dye* 1602 (the OED has several other verbs from about 1600, which seems to indicate that *double-*verbs were vogue words at that time), *browbeat* 1603, *flyblow* 1603, *winterfeed* 1605, *eavesdrop* 1606, *frostbite* 1611, *thunderstrike* 1613, *spoonfeed* 1615, *stargaze* 1626, *hidebind* 1642, *housewarm* 1666, *rough-grind* 1660, *henpeck* 1688. The type *new-create* from *new-created* was very productive in the 17th century: *new-create* 1604, *new-form* 1610, *new-furnish* 1611, *new-make* 1617, *new-cast* 1650, *new-mould* 1650, *new-model* 1665, *new-coin* 1700.

Coinages of the 18th century are *smokedry* 1704, *clear-starch* 1709, *merry-make* (rare) 1714, *bogtrot* 1734, *stallfeed* 1763, *case-harden* 1771, *waterlog* 1779, *ill-treat* 1794.

2. 37. 3.   19th century words are *horrorstrike* (rare) 1811, *winterkill* 1817, Shelley's *housebreak, sheepsteal, and shoplift* 1820, *sightsee* 1835, *roughdry* 1837, *bushwhack* 1834 DA, *logroll* 1835 DA, *halterbreak* 1837 DA, *housekeep* 1842, *bootlick* 1845 DA, *awestrike* 1850, *topdress* 1852, *stillhunt* 1858 DA, unanalysable *jayhawk* 1866, *carpetbag* 1872 DA, *closeherd* 1874 DA, *stagemanage* 1879, *wirepull* 1883, *globetrot* 1883, *dressmake* 1885, *moonlight* 1887, *typewrite* 1887, *ringbark* 1887, *roughride* 1890, *sheepwash* 1891, *backpeddle* 1891, *springclean* 1894, *hogtie* 1894 DA, *thoughtread* 1898, *handshake* 1898, *dryclean* 1899.

2. 37. 4.   Our century has coined *drayhaul* 1902 DA, *sightread* 1903, *nightherd* 1903 DA (West. AE), *shopwalk* 1905 (Wells), *wildcat* 1903 DA, *bootleg* 1906 DA, *muckrake* 1910 DA, *drywash* 1912 DA, *dryfarm* 1917 DA (West. AE), *jerrybuild* 1918, *sleepwalk* 1923, *hitchhike* 1923 DA, *hogcall* 1927 DA, *ghostwrite* 1928 DA, *pinchhit* 1931 DA, *proofread* 1934 DA, *sharecrop* 1937 DA, *baby-sit* 1947 (American Speech 24 (1949) 72), *chainsmoke* 1946 (American Speech 21 (1946) 148), *copyread* 1945 (American Speech 21 (1946) 148). Webster (1955) lists *playact* (which is very common) and *handpick* (which is less common), but none of the standard dictionaries (OED and Spl., DAE, DA) records them. I have heard *applepolish, double-park* (not even *applepolisher* and *double-parking* are in the just mentioned dictionaries, Webster included), *taperecord, vacuumclean, brainwash, housebreak* (speaking of dogs), though I have not come across them in print.

The commonly used verb *bottlefeed* is in none of the Standard dictionaries while *breastfeed* is recorded in OED Spl. for 1928.

Comparison between the two groups

2. 38. 1.   The smaller number of B group verbs as against coinages of the A group seems natural if we consider that nominal compounds of the *spotlight* and *blacklist* type are probably more frequent than synthetic compounds of the types *stage-manager, play-acting*, and *spoonfed*. Another important factor is the composition of synthetic compounds: the second element (in most cases) is a verb, so a consistent derivation and use of these composites would involve a real compound verb type, based on a determinant/determinatum relationship, a grammatical change of great structural implications (see above). Traditional linguistic habits tend to prevent speakers from breaking up old syntactic patterns by which verbal complements follow the verb in sentences. People do not usually *cardrive, taxpay, wirepull, housekeep, or merrymake*, but *drive cars, pay taxes, pull wires, keep house, and make merry*. With combinations which are unmotivated for the speaker, there is of course less hesitation. *Bootleg, browbeat, eavesdrop, henpeck, blackmail, pettifog, partake, freeboot* are such examples.

2. 38. 2.   The more the basis is felt to have a particular meaning, the more likely it is to derive a full verb. This is especially the case with technical terms, only used in a certain environment. *Topdressing* is not just any dressing of some top, but has a very definite meaning for farmers and road builders. In the jargon of farming and road construction therefore, *topdress* is used as a full

verb. But a housewife who dresses the top of a cake she has baked will probably not use the verb *topdress* for the process. Similar considerations apply to many of the verbs given in the preceding lists. *Nightherd, closeherd, halterbreak, logroll, stillhunt* are tied up with certain very definite ways of American life, *winterfeed, stallfeed, winterkill, smokedry* are terms used by farmers, only mechanics *spot-drill, spot-face, spot-grind, spot-mill, dead-melt,* or *spot-weld.*

2.38.3.   At the present stage of the language, speakers who use a pseudo-compound verb are aware that they are deriving it from a nominal composite basis. Therefore, although people *housebreak* dogs or *proofread,* they will not *bookread, letterread, promisebreak,* or *cupbreak.* That an occasionally used verb *handpick* can be analysed as 'pick by hand', is linguistically not relevant. The speaker who uses it derives the verb from the adjective *handpicked* which is stored in his linguistic memory. One does not say 'handpick' berries, cotton or the like when one simply wants to say that the picking was done by hand. Considering the four century old history of the verbs under discussion, it does not seem that the existence of the several pseudo-compound verbs will bring about a genuine compound verb type.

2.38.4.   Derivatives from composites whose second element is a primary noun, i.e. *A* group verbs with the exception of the type *joyride,* are structurally far less objectionable and used more freely, as they are only one step farther than the simple desubstantival type *father* vb from *father* sb. That in this group, too, many combinations are technical terms only, is not an objection of principle. The problem is not of a derivative but of a semantic nature, which arises also with simple denominal verbs. *Bark* (trees), *fin, gill, gut, scale* (fish), *stone* (fruit), *worm* (plants) are all technical terms, used in particular environments only.

2.38.5.   Pseudo-compound verbs have been steadily increasing in Modern English, especially since the beginning of the 19th century. Their growth, however, has been largely on the colloquial or slang level. This is one of the reasons why they are still not really established in literary usage, though even educated speakers use them in conversation. Many people are hesitant about them, consciously or unconsciously considering them to be 'not good English'. This is the usual attitude of speakers towards new linguistic trends. That some new formations have a "transitory status" and others show "a nuance of humor"[1] is not disputed, but it hardly characterizes the group as a whole.

2.38.6.   *B* group verbs containing a strong verb as the second element usually follow its pattern of conjugation. There has been some vacillation in usage (see H. W. Fowler in S. P. E. Tracts 19, 1925). *They broadcasted* may be heard besides more common *they broadcast* (*I broadcasted from the New York studio,* John P. Marquand, Melville Goodwin, USA. Boston 1951, p. 3). Erroneous analysis may lead to *hamstring* though the second element is not the verb *string.* In German, verbs derived from composites always follow the weak conjugation: *sie handhabten, ratschlagten, willfahrten,* for instance, and the

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[1] Robert A. Hall, Jr., *How we noun-incorporate in English.* American Speech 31 (1956) 83—88, p. 86.

prefix *ge-* is placed before the whole combination: *gefrühstückt, gehandhabt, geliebkost*. But for English, Jespersen's statement that "new-formed verbs are usually weakly inflected" (MEG VI. 6. 83 note) is not correct. One would probably never say *I typewrited, he housebreaked*. The tendency to pattern the composite after the second verbal element has always been prevalent. Thus, although weak forms are cited in the OED for *backbite*, yet *backbited* ptc 1393 and *backbited* pret. 1496 are isolated among the inflected forms which follow the strong conjugation.

2. 38. 7.   The stress of pseudo-compound verbs depends on the stress of the underlying nominal basis: the verb has the same stress as the nominal composite from which it is derived. Some nominal compounds have a stable pattern, as *stáge-mànager, plaý-àcting, joý-rìde, leáp-fròg*[1] which the verbs preserve (*stágemànage, týpewrìte, plaýàct, spríngcleàn, joýrìde, spótchèck, leápfròg, pitchfòrk*). Verbs of the *spotlight* type are almost all derived from forestressed compounds: *spótlìght, eármàrk, snówbàll* etc. Some verbs derived from an adj/sb basis follow the forestressed *blacklist* type: *blácklìst, roúghhoùse, highhàt* etc., but others are derived from syntactic groups, as *cold shoulder, double cross*. As the adjective usually has a positional middle stress, the verb has one, too: *còld shoúlder, doùble cróss*. Participial adjectives have two full stresses, phonemically speaking. Dictionaries in such cases speak of variable stress. The derived verb, therefore, has no stable pattern. Such adjectives as are commonly forestressed will derive a verb with the same pattern (e.g. *spoónfeèd, spéllbìnd, tónguetiè*), but we may hear *hàndpíck* as well as *hándpìck*.

[1] See 2. 1. 10—15.

COMPOUNDS WITH LOCATIVE PARTICLES AS FIRST ELEMENTS

2. 39. 1.   A description of the types of preparticle compounds is hardly amiss as the subject has been much neglected in handbooks of grammar. It is not discussed at all in Jespersen's Morphology[1] and receives only a scanty treatment in Koziol's book[2].

2. 39. 2.   In all periods of the language there have been locative particles as first-words of compounds. In German, pronominal adverbs also are used with substantival compounds (*Herkunft, Dasein, Darlehn, Hierbleiben*). Unfortunately, this formative type is not mentioned in the latest book on German word-formation[3]. The corresponding English type has been weak. OE *hidercume* 'hithercome, arrival' is last quoted in 1440. A few other instances are *here wunenge* 1200, *here-being* 1377. In Shakespeare we find *here-approach, here-remain, hence-departure, hence-going*. In addition to these substantives we have a few MoE participles such as *hence-meant, hence-got, hence-brought* (only *hence* appears to occur) which are archaic or obsolete now. The locative particles are *after, by* (*fore* is no longer an independent word but a prefix), *forth, in, off, on, out, over, through, under, up*. They regularly precede substantives and adjectives, though not all with like frequency. With verbs, combinations are no longer freely possible. In OE, locative particles with verbs were what is often called 'separable prefixes', i.e. they were particles which preceded certain and followed other verb forms, according to rules of usage which are irrelevant to our subject. Suffice it to say that in OE the majority of particles formed no fixed combinations with verbs. The particles which regularly preceded a great many verbs in the way *under* does in *understand* are *under, fore*, and, in a lesser degree, *over*[4]. Other particles which had become inseparable prefixes with verbs but died out in early ME are *gain* (as in *gainsay, gainstrive, gainstand*) and *with* (as in *withdraw, withhold, withstand*). OE *þurh, æt*, and *ymb* had in OE shown a tendency toward combination (cp. also 14th c. words like *umthoght, umstrade* 'bestrode', *umseged* 'besieged', q. OED s.v. *ymb-*) which, however, died out, as locative particles came to be placed after the verb[5]. By the 15th c. the language had attained the stage where locative particles regularly followed the verb. This assumption is probably safe if we allow a certain amount of fluctuation. That the postpositional verbal type *go out* was pretty well established as far back as the 14th c. (see Curme 329) is proved by the existence of such agent nouns as *comer about, maker up, finder up, looker on*

[1] O. Jespersen, *A Modern English Grammar on Historical Principles*. Part VI. *Morphology* (Copenhagen 1942).

[2] H. Koziol, *Handbuch der englischen Wortbildungslehre* (Heidelberg 1937).

[3] W. Henzen, *Deutsche Wortbildung* (Halle 1947, 2nd ed. Tübingen 1957).

[4] T. P. Harrison, *The Separable Prefixes in Anglo-Saxon* (Baltimore diss. 1892).

[5] G. O. Curme, The Development of Verbal Compounds in Germanic, *Beiträge zur Geschichte der deutschen Sprache und Literatur* 39 (1914) 320—361.

which Langenfelt has traced to that century[1]. On the other hand, prepositive usage must have lingered on considerably longer as the prefixal type *outgrow* is not attested before the second half of the 15th c. whereas, if postposition of the particle had been a fixed pattern in the 14th c., no inseparable verbal prefix *out-* could have arisen later. In point of fact, we find new formations with prepositive *out-* in a locative meaning as late as the 16th c., though we cannot now say whether they represent a more than literary type. For *outbreathe* 'breathe out, exhale' 1559 and *outhold* 'hold out (as hold out one's hand)' 1512, OED has prose examples up to 1600 while in PE the verbs would be poetic only. *Outcry* 'cry out, publicly' does not seem to be recorded before the 15th c. (1430—40) and is last instanced for 1688.

2. 39. 3.   Those particles which had not, by the 15th c., acquired the character of inseparable prefixes with verbs could no longer precede verb forms, except the nominal ones (verbal substantive and participles). Curme explains the rise of post-particle verbs from a tendency to give the particle more stress. If, as he says[2], "only moderately or weakly strest adverbs remained before it" (= the verb), it is difficult to understand the strong middle stress which particles have as first elements of compounds today. There were certainly other reasons which account for the new trend in word order with verbal combinations containing a particle[3].

Back and *down* are not originally locative particles, but form the same types of combinations and may therefore be included.

2. 39. 4.   The following preparticle types are possible (reference to them in other places is made by number):

1) *income* (deverbal impersonal substantive),

2) *onlooker* (deverbal personal substantive),

3) *onlooking* (verbal substantive),

4) *oncoming* (first participle),

5) *inborn* (second participle),

6) *outgrow* (verb),

7) *overanxious* (adjective),

8) *afternoon* (prepositional combination used as substantive),

9) *upstairs* (prepositional combination used as subjunct),

10) *an upstairs room* (prep. combination used as preadjunct),

11) *outhouse* (substantive based on an adjunct/primary relation),

12) *intoed* (possessive adjective).

In types 1—7 the particle has adverbial force, in types 8—10 it functions as a preposition, in types 11—12 it is used as an adjective. With the exception of type *intoed*, which is Modern English only, all types go back to Old English (for type *onlooker* see below).

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[1] G. Langenfelt, *Select Studies in Colloquial English of the Late Middle Ages* (Lund 1933).

[2] Curme, op. cit. 324.   [3] See 3. 1. 4—5.

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2. 39. 5.   Combinations of the type *income* are deverbal substantives with a verbal nexus determinant (*in-come*) and a zero determinatum. The zero morpheme may theoretically stand for anything connected with the signifié of the determinant. Practically, however, it expresses either the act or fact, more often the specific instance, the concrete result, the place, the agent (only the impersonal agent with preparticle compounds) of the action denoted by the underlying verb[1]. The idea of 'act' is expressed in *outset, outbreak, uptake*. The sense of 'specific instance' is contained in *backset* 'reverse', *backfall* (a wrestling term), *backlash* (machinery term), *downfall, downpour, downrush, outburst, outcry, upturn* 'change for the better'. The idea of 'agent' underlies *downfall* 'trap', *downhaul* 'rope' (naut. term), *income, outfit, outcome, upkeep, upstart*. Result-denoting are such words as *backwash, outlay, outturn, output, throughput* while the concept 'place' is expressed in *outlet, inlet, outfall, outrun, outcrop* (geological term).

Combinations such as *a forward lurch, an inward rush, a backward thrust*, where the first member is a suffixal derivation from a particle, do not belong here. They are regular adjunct/primary groups (deverbal substantives with a zero morpheme preceded by an adjective) with syntactic double stress, meaning 'act, fact, instance of -ing forward etc.'.

2. 39. 6.   The type *onlooker* is similar to the type *income* in that again we have a predicate/subjunct verbal nexus as determinant, but it is different in that the determinatum is positively marked by the suffix -*er*. Thus an *onlooker* is 'an -*er* who looks on', from the standpoint of the signified. However, in the case of both *income* and *onlooker*, the analysis of the significate clashes with that of the significant, the constituent formal elements, which, by the principles of English word-formation, must be that of *onlooker* and *income*. Both types are what is called 'synthetic compounds'[2]. The type *onlooker* has replaced the Old English type *æfter-genga*. The earliest instances I have found are from the 14th century[3]: *þe efter telleres* 1340 (Ayenbite 58, q. OED s.v. *after*), *aftercomer* (Wycl. Lev. XXII. 3, q. ibid.) 1382 which are obsolete now. Other Middle English coinages are *outrider, overseer, undertaker*. After *outrider* the word *outrider* (1598) was formed, both chiefly denoting attendants of a carriage. Other instances are *onsetter* 'inciter' 1549, as a mining term in the sense 'one who hangs on the corves upon the rope' 1789, *backslider* 'apostate' 1581, *onlooker* 1606, *outlier* 1610, *bystander* 1619, *underwriter* 1622, *outsettler* 1756, *downcomer* 'pipe conducting gas' 1896. Both the type *income* and *onlooker* have not formed any non-technical words for a long time past. In German, the corresponding types are exceedingly strong, but most words can be understood as derivations from verbal phrases: *Einkommen, Auskommen, Abkommen, Unterkommen, Abschrift, Aufschrift, Niederschrift, Unterschrift* etc. / *Abnehmer, Aufnehmer, Ansager, Ausreißer, Nachbeter, Zuträger* etc. In English, a similar connection has not developed or ceased to exist owing to the rise of post-particle verbs (*come in*) which, in turn, came to derive deverbal nouns. The

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[1] See 4. 1. 9.   [2] Cf. 2. 1. 3—5.
[3] Combinations of the type *householder* (agent nouns based on a predicate / object relation) are somewhat older. Carr, *Nominal Compounds in Germanic* (London 1939, p. 229) has a few instances from the 9th century.

rival types of *income* and *onlooker* are *blackout* and *looker-on*. But whereas *blackout* combinations represent one of the most productive types of present-day English word-formation[1] (cp. such recent coinages as *playback, flashback*), the type *looker-on* has not really developed. This may be due to the infixal character of the determinatum to which the English linguistic system is averse. As it is, both type *onlooker* and type *looker-on* are weak.

2.39.7.   The meaning of combinations of the types 3—5 is self-evident. They are analysable as verbal substantive resp. participles determined by a locative particle. The most common words belonging to type 3 are perhaps *oncoming, outgoing, upbringing, upsurging, inbreeding*, also *incoming, indwelling, inbeing, ingathering*, those of type 4 *bystanding, downfalling, forthcoming incoming, ingrowing, onlooking, oncoming, outstanding, outgoing, outlying, upstanding*, while type 5 is represented by *bygone, downcast, downfallen, downtrodden, inborn, inbred, ingrown, offcast, outcast, outbound, undersigned, uplifted, upswept*. For other coinages see the respective particles.

Type 6 applies only to the particles *under, over*, and *out*. *Up* has developed the character of a doubtful bookish preparticle. Type 7 applies to *over* only in present-day English.

Types 8—10 are structurally one type, the difference being a matter of function, viz. their uses as primaries, secondaries, or tertiaries. The type *afternoon* is the weakest of the three.

2.39.8.   The type *outhouse* (11) applies to all particles except *forth* and *on*. However, not all particles have been equally productive in forming fore-stressed compounds. The strongest are *after, by, out, over, under* and *up*. The particles *after, off, over, through*, and *under* are also used as full adjectives and may thus enter into syntactic combinations such as *in after years, an over copy, an off chance, the under side, a through ticket*. The phenomenon is parallel to the coexistence of the forestressed compound type *bláckbìrd* and the double stressed syntactic type *bláck bírd*[2]. Only morphologically isolated types should be treated in word-formation which excludes the above mentioned syntactic groups. The type *intoed* (12) is weak and has coined words of essentially literary character only.

2.39.9.   We have not yet approached the important question of the relevancy of preparticle combinations to word-formation. So far we have spoken of them as compounds, but we have not as yet proved their compound character. Koziol, whose book shows a general lack of critical attitude in matters of word-formation, treats preparticles as prefixes. Such a procedure, however, is not justifiable as particles are full words whereas prefixes are dependent morphemes. Not only are preparticle combinations not prefixal derivatives, but we have to ask ourselves whether they are compounds or syntactic groups. I have touched elsewhere upon the question of derivative relevancy with

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[1] Cp. U. Lindelöf, *English Verb-Adverb Groups Converted into Nouns* (Helsinki 1937). The statistics made by Lindelöf would show an even greater increase of productivity if made today.

[2] See below 2.39.8.

regard to nominal compounds[1]. The principle is the same with preparticle combinations: the criterion of relevancy of a type of word-formation is its isolation from a parallel syntactic construction. In the types *income, onlooker,* and *onlooking* (1—3), the particles function as subjuncts with regard to their second-words. The absence of syntactic groups of a similar structure and additional morphophonemic forestress settles the question of relevancy. Types *oncoming* and *inborn* (4—5) represent participles qualified by a subjunct of time or place. Syntactically, the subjunct cannot precede the participle, which establishes the morphological character of the types. Most combinations are only used attributively: *outgoing mail, oncoming waves, outbound ship* etc. *Forthcoming* is quite common as a predicative also: *the book is forthcoming.* Some of those combinations which have become full adjectives, occur also in predicative position, as *outstanding, downcast, downtrodden,* but others, as *outbound, upstanding,* would hardly be so used. The verbal type *outgrow* (6) looks like a common syntactic group 'verb preceded by adverb', as in *he completely forgot him.* However, in all the existing verbal combinations, the particle has a meaning which it lacks as an independent subjunct. Moreover, the position of the particle is restricted to the place immediately before the verb whereas regular adverbs of degree (*completely, excessively, entirely*) may either precede or follow the verb (*completely, entirely*) or can only follow it (*excessively, extremely*). The semantic criterion of the type *outgrow* also applies to the adjectival type *overanxious* (7). *Over,* in the sense of 'excessively', cannot be used in isolation, i.e. it is no independent word. The type *upstairs* (9) is morphologically characterized by the absence of the article in situations where syntactic conditions would require it. Cp. *up the hill, down the river* with *uphill, downriver.* The use of such words as preadjuncts (type 10) is essentially a syntactic problem. On the other hand, there are many type 10 combinations which exist as preadjuncts only: *an overall picture, an underarm stroke, an after shave lotion* a.o. Full morphological isolation is established for combinations with a verbal basis. As there are no syntactic subjunct groups consisting of particle and deverbal substantive, combinations of the *after shave lotion* type necessarily have morphologic standing. Whereas the use of subjuncts (*upstairs*) as preadjuncts (*an upstairs room*) is a predominantly functional matter, the use of subjuncts as primaries is not, as it involves the addition of a new semantic element which is represented by a zero morpheme: *afternoon = time of . . ., outlaw, outcaste = person who is . . ., overall = garment worn . . .* etc. Usually, these combinations are either not used as subjuncts at all (*afternoon, outlaw, outcaste, overall, overdoor* 'picture, carving . . .', *overmantel* 'ornamental structure . . .', *undergraduate*) or have a different sense from that of the subjunct (*underground* 'the lower regions'). *Outdoors* 'the world . . .' is perhaps nearest to the character of a mere quotation noun. Type *outhouse* (11) is isolated from syntactic constructions by its morphophonemic forestress. The type *intoed* (12) is treated here for practical reasons only. Combinations of this type are not compounds but suffixal derivatives with the determinant *in + toe* and the determinatum *-ed,* comparable to combinations of the types *hunchbacked* and *palefaced*[2].

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[1] See 2. 1. 3—5.   [2] See 2. 1. 5.

2. 39. 10.   Stress in preparticle compounds. Being full words, particles have a heavy stress basically. But retention or reduction of this heavy stress is dictated partly by morphophonemic, partly by rhythmic causes. The only invariable stress patterns are those of the types *incòme*, *ónloòker*, *oúthoùse*, and *ónloòking* (verbal substantive) which thus have morphophonemic value. The type *oúthoùse* is matched by a double stressed syntactic group type *óver cópy*, just as the nominal compound types *heádàche* and *bláckbìrd* have syntactic counterparts in the types *stóne wáll* and *bláck bírd*[1]. Other combinations have the stress pattern heavy stress/middle stress in preadjunctal function while as predicatives they usually shift to the pattern middle stress/heavy stress. This applies to the types *oncoming* (4), *inborn* (5), *upstairs room* (10), and *intoed* (12). The shifting of stress is a normal rhythmic phenomenon in English with monomorphemic as well as bimorphemic words or groups which in predicative position or in isolation have the basic or rhythmically reduced pattern middle stress/heavy stress (*the Chìnése* ~ *the Chìnèse language*, *ùnbórn* ~ *an únbòrn child*, *wèll-mánnered* ~ *a wéll-mànnered gentleman*). Type 5 has the same stress pattern. However, with the exception of full adjectives such as *outstanding*, *downtrodden*, *downcast*, and participial *forthcoming* which are also used as predicatives and then have the middle stress/heavy stress variant, we find combinations of the type only as preadjuncts with the stress variant heavy stress/middle stress. Types 8—10 are coined as prepositional groups, so the main stress is expected to be on the noun while the basic heavy stress on the particle is, for rhythmic reasons, usually reduced to a middle stress. This is, indeed, the common pattern of type 9: *dòwnstairs*, *ùpstairs*, *dòwntówn*, *òverseás* etc., though many combinations are more or less regularly subject to the influence of contrast and are therefore pronounced with forestress (*inboàrd*, *oútboàrd*, *índoòrs*). But used as preadjuncts they usually shift their stress (*my úpstaìrs room*, but also *the òverseás edition*). Type 8 is unstable: we say *àfternoón*, *ùndergráduate*, but *oútlàw*, *ínlàw*, *oútcàste*, *óveràlls* where the forestress is perhaps due to the analogy of other forestressed substantives. The type *outgrow* (6) is again best described as having two heavy stresses basically. However, the variant most frequently occurring is that of middle stress/heavy stress. The variant heavy stress/middle stress is used for rhythmic (*he óverheàrd a conversation*, *to óverthròw the government*) or contrastive reasons (*you are únderstàting the difficulties*). Double stress is normal also for the type *overanxious* (7) which is perhaps chiefly due to emphasis.

2. 40.   after-

chiefly forms cbs of type 10. It has temporal meaning in cbs of the type áfter-effèct 'later, subsequent . . .', the strongest of the group. Examples are *afterclap*, *aftercrop*, *aftercourse*, *aftergame*, *aftergrass*, *aftergrowth*, *aftergrief*, *afterglow*, *afterimage*, *aftermath*, *afterplay*, *afterpain*, *afterpiece* 'farce', *afterthought*, *afterwit* (arch.), *aftershock* etc. The nuance is sometimes that of 'immediately following', as in *after-birth*. The type is OE (*æfter-yldo* 'later age', *æfter-sang* a.o.), but of the cbs in use today, *afterclap* 1420 is prob. the oldest.

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[1] See 2. 2. 4.

The particle has locative meaning in technical terms of the type áfterbràin, as in *after-body, after-breast, after-nose, after-wrist* and nautical terms such as *after-cabin, after-leech, after-sails, after-deck, after-yards, after-guard.* The usual implication is 'posterior part of . . .', in nautical terms 'situated toward the stern'.

In sense 'subordinate, inferior' the particle is no longer a living formative. We find it in obs. *afterdeal* 'disadvantage' (1481—1634) and OE *æfter-ealo* 'small beer'.

Type 1 is not represented, type 2 has formed *afterliver* 'survivor' and *after-beer.* Of type 3 there is the obs. word *aftercoming* 1382, of type 4 the likewise obs. ptc *aftercoming* for which the OED has two examples, one from 1594, another from 1598. Of type 5 we have *afterborn* OE and modern syntactic cbs such as *after-described, -mentioned, -named, -specified* which are not much used. For types 6 and 7 there are no coinages, while type 8 has formed *after-noon* 1450, obs. *afterdinner* 1576 and obs. *aftersupper* 1590 which are now cbs of type 10. Of type 9 we have the obs. cb *afterhand* 1425 which seems to have been rare anyway. Type 12 has not formed any cbs.

2. 41. back-

is not a locative particle but a ME secretion from the syntactic group *a-back* 'at the back'. On the analogy of locative particles it has since ME, but chiefly from the 16th. c. on, formed cbs such as *backfall, backlash, backset, backstitch, backwash* (type 1), *backslider* (type 2), *back-cast* (type 5), *backfriend, background, back-hand, back-log, back-stroke, backwater.*

2. 42. by-

goes back to OE, but none of the words now in use is older than ME. Type 1 has formed *by-blow* 1595 'bastard' and obs. *by-slip* 1612 'trivial fault; bastard'. Of type 2 we have cbs such as *by-stander, by-stroller, by-passer,* of type 3 *bygoing* (as in *in the bygoing*), of type 4 occasional cbs such as *by-standing, by-peeping,* of type 5 *bygone* 1424, *by-past* 1425 and occasional cbs like *by-flown, by-advanced.* The other types have formed no coinages except type 11 which is very strong. From the OE period we have only *by-word, by-law* (which is partly a variant of *byrlaw* 'local law') and the obs. *byspel, bispel* 'parable' (last rec. from 1656 in NED).

In cbs of the type bý-pàth the particle has the meaning 'running alongside of the main . . ., secondary, out of the way'. The sbs are concrete and chiefly denote place, as *by-alley, by-route, by-lane, by-way, by-pass, by-road, by-walk, by-street, by-place, by-room, by-chamber, by-window, by-table, by-altar, by-office.*

With abstract sbs of the type bý-làw the meaning of the particle is 'not the main', as in *by-word, by-law* OE, *by-name* ME, *by-plot, by-election, by-play,* or 'incidental, casual, trivial' as in *by-business, by-charge, by-effect, by-matter, by-product, by-talk, by-work,* or 'collateral' as in *by-consideration, by-interest, by-question, by-form,* or 'private, indirect, underhand', as in *by-aim, by-design, by-intent.*

2.43. down-

is, like *back*, not originally a locative particle, but an Early Middle English secretion from the group *a dune* 'offhill'. It has formed such words as *downcast, downfall* 1300, *downcome* 1513, *downhaul* 'rope' 1669, *downthrow* 1615, *downpour* 1811, *downrush* 1855 (type 1), *downlying* 1526, *downlooking* 1823 (type 4), *downtrodden* 1568, *downfallen* 1596, *downcast* 1602 (type 5), *downstairs* (8—10), *downhill, downtown* (9—10), 19th c. combinations of type 11 such as *downdraught, downgrade*, and the suffixal derivative *downhearted* 1774 (type 12).

2.44. forth-

has always been a weak formative (see Harrison for OE). The only common word is probably participial *forthcoming* 1521 while the verbal nouns *forthgoing* 1382, *forthcoming* 1533, and *forthputting* 1640 are of restricted currency. In Old English there were also deverbal substantives such as *forðgesceaft* 'future', *forþsíþ* 'death' and others, and adjectives such as *forðgeorn* 'eager to advance' etc. of which no traces are left.

2.45. in-

has formed a good many cbs, but only a few of them belong to colloquial English. Many are only in technical use. Of type 1 we have *infare* OE, *income, insight, inlet* ME, *indraught* 1570 orig. 'act of drawing in', *inset* 1559, *intake* 1523, *inturn* 1599, *inroad* 1548 'a road (= riding) into a country', *input* 1793, *inburst, inrush, inbreak, inlook* (all 19th c.). Type 2 has coined cbs like *incomer* and *indweller*, type 3 such cbs as *incoming, inrunning, indwelling* (ME), *inbeing, ingathering* (16th c.), *inlying* 1734, *inbreeding* 1842. Of type 4 there are *indrawing* 1598, *incoming* 1753, *ingrowing, inlying, inrolling* (19th c.). Type 5 has formed *inborn* OE, *inbent, inbred* (16th c.), *ingrown, inwoven, inwrought* (17th c.), *indrawn* 1751. Type 6: *in-* was a 'separable prf' with vbs in OE, but the influence of Latin in OE translation (see Harrison 22 ff.) and app. also in ME (see *em-, en-*) often led to verbal cbs. In *em-, en-* we have partly the element of the native particle (see prf *em-, en-*). *Indrawal* 1869, however, is no deverbal derivative, but coined after *withdrawal*. Type 7: the particle forms no adjs today, but in OE and ME it did with meaning 'very, thoroughly'. Type 8 has formed *inlaw* (after *outlaw*), type 9 has coined *indoor, inboard*, while *indoors* belongs to type 10 (*inboard* is both 9 and 10). Of type 11 there are such combinations as *inland* OE, obs. *inwit* ME, *infield* 1551, *inwall* 'inner wall' 1611, *inmeats* 'entrails' 1616. The particle has the meaning 'resident' in *in-patient, in-pensioner* and a few others (see OED *in* adv. and a. 12), usually in opposition to *out-* combinations. Type 12 is represented by such words as *inkneed* 1724 and *intoed* 1824.

2.46. off-

has formed such combinations as *offspring* OE, *offal** = *off-fall* ME, *offset* 1555, *offscum* 1579 (rather than type 11 which has been unproductive with the particle), *offcut* 1663, *offshoot* 1674, *offtake* 1793, *offlet* 1838, *offprint* 1885, all type 1. Other types are represented by *offscouring* 1526, *offreckoning* 1687

(type 3), *offcast* 1571 (type 5), *off-color*, *off-peak* (type 9), *offhand*, *offshore* (types 9, 10). Type 11 has not developed. Free syntactic groups (*óff chánce*, *óff gráde* etc.) are the rule with the particle.

2.47. on-

is a weak formative. All PE combinations are modern, chiefly 19th century. We have such combinations as *onset* 1513, *oncome*, *onrush*, *onflow*, *onlook*, *oncry* (19th c.), all type 1. To other types belong *onsetter* 'inciter' 1549, *onlooker* 1606, *onhanger* 1848 (type 2), *oncoming*, *ongoing* (type 3, 19th c.), *onlooking* 1663, *oncoming*, *oncarrying*, *onmarching*, *onrolling*, *onrunning*, *onrushing*, all 19th c. (type 4). *Onslaught* 1625 translates early Dutch *aenslag*.

2.48.1. out-

has been a very productive formative. Examples are *outcome*, *outcry*, *outleap*, *outlet*, *outlook* ME, *outset* 1540, *outbreak*, *outfall* (of a river etc.), *outburst*, *outgo* 17th century, *outlay* 1798, *outspread* 1841, *outthrust* 1842, *outstretch* 1863, *outpour* 1864, *outflow* 1869, *outrush* 1872. Other 19th c. words, all with the basic meaning 'result', are *outcrop*, *output*, *outthrow*, *outturn* (type 1). Type 2 has produced such words as *outrider*, *outgoer* ME, *outrunner* 1598, *outlier* 1610, *outsettler* 1756, *outkeeper* (a surveying instrument) 1875. Type 3 is represented by *outgoing* and *outcasting* ME, type 4 by *outstanding* 1570, *outgoing* 1633, *outlying* 1663, type 5 by *outcast* 1374, *outbound* 1598. Of type 8 we find *outlaw* (translating L *exlex*) OE, *outcaste* 1876, of type 9 the 19th c. words *outboard*, *outdoor*, *outdoors*, while *outdoor* 1765, *outboard* 1827, *outcollege* 1861 are instances of preadjunctal combinations. Type 12 is represented by such uncommon derivatives as *outlipped*, *outbellied*, *outeyed*, *outkneed*, *outshouldered*. Types 11 (*outhouse*) and 6 (*outgrow*) have exceeded all others in productivity.

2.48.2. The meaning of the type o u t h o u s e is '. . . being, living, situated outside'. Examples are *outland* OE, *outhouse* ME, *outbuilding*, *outcity*, *outdistrict*, *outport*, *outfield*, *outkitchen*, *outclerk*, *outpatient*, *outpost*, *outguard*, *outsentry*, *outworld*, *outparish* a.o. The nuance 'exterior, external, outer' (as opposed to 'inner') underlies *outline*, *outskirts*, *outbranch*, *outedge*, *outlimit*, *outsole*, while the sense 'leading out, outside' is expressed in *outstroke*, *outpath*, *outway*, *outrail*, *outwall* a.o. In *outsize* the implication is 'unusual, not standard'.

2.49.1. over-

The type o v e r c o a t is the chief aspect of pre-particle type 11. The meaning is 'outer, covering . . .'. Exs are chiefly MoE: *overclothing* 1425, *overgarment* 1485, *overbody* 1573, *overclothes*, *overdress*, *overshoe*, *overskirt*, *oversleeve* (all 19th c.). Technical terms are *overleather* 1408, *overcloth*, *overglaze*, *overcoil*, *overhair*, *overbridge*, *overglass* 'glass placed over a mantelpiece', with meaning 'second, overlying . . .' or the like (all from the last three decades of the 19th c.).

2.49.2. The weaker variant of the preceding type is the type o v e r l o r d where the pt has the figurative meaning 'higher, superior . . .'. Exs are *overking* 1200 (a historical term now), *overlord* 1200, *overman* 1708 (now rivaled

partly by *foreman* in sense 'overseer', partly by *superman* 'Übermensch'),
oversoul 1841 (a New England transcendentalist term). There have been
occasional coinings such as *overchief, overchanter, overgod.*

2. 49. 3.   The type over time 'time beyond, exceeding the usual norm' has
such MoE cbs as *overweight* 1552, *overgrowth* 1602, *overcharge* 1611, *overdraft,
oversize, overtime, overwork* (19th c.).

2. 49. 4.   The type over-caution 'excessive, too great caution' is the em-
phatic counterpart of the preceding type. Like other cbs where emphasis is
expressed (*grass-green, untrue, non-smoker* etc.) coinages of this type have
double stress. Exs are *overlove* (OE, but ref. in 19th c.) *overcold, overhaste,
overtrust* (ME), *overburden, overcare, overheat, overmeasure, overquantity* (16th
c.), *overload, overproportion* (17th c.), *overcaution, overstrain, overzeal* (18th
c.), *oversupply, overtoil, overuse* (19th c.). As the pt forms also adjs and vbs,
there are many derived sbs which are thus doubly connected. Exs are *over-
boldness, over-carefulness, overfrequency | over-exertion, over-exposure, over-
indulgence, over-production, oversale.*

The degree of cohesion with cbs of this type is looser than with other

Despite its double stress, the pattern is morphologically isolated as a
competitive forestressed type does not exist; in the sense 'excessive' *over* is no
independent word and cannot be separated from its second-word or be placed in
isolation.

2. 49. 5.   Other meanings in substantival cbs than the ones described are not
found in StE: *overword* 'repeated word, refrain' is Sc, *overtone* renders G
Oberton.

2. 49. 6.   The type over-anxious 'too, excessively anxious'. *Over* is the only
pt in PE which forms underived adjs. The type goes back to OE from which
about 30 cbs are recorded (acc. to OED). Most of the PE examples are MoE
though many cbs have survived to the present day. Exs are *overcold, overfat,
overfull, overgreedy, overhigh, overloud, overproud, overrank* (OE), *overbusy,
overcommon, overdear, overdesirous, overfeeble, overgreat, overhasty, overhot,
overkind, overlong, overlow, overmuch, overnice, overold, oversharp, overshort,
overstrong, oversubtle, overswift, overwell* (ME), *over-curious, over-credulous,
over-confident, over-due, over-delicate, over-gentle, over-individualistic* (16th c.
and later). Cbs are practically ad libitum, and most of the adjs have derived
sbs in *-ness.*

2. 49. 7.   Exs of participial adjs are *over-agitated, over-assessed, overbred,
overfurnished, overjoyed, overstrung, overworn,* over wrought etc. They are
coined as synthetic cpds, i.e. regardless whether the second element occurs
as an independent adj or not, parallel to such cbs as *well-dressed, undressed,
under-dressed.*

The degree of cohesion with cbs of this type is looser than with other
cbs in that they admit of separation in cases of contrast: *many under-
developed countries are over, not under, advised* (The Economist, 1952, Jan. 19,
p. 150).

The second element is a first ptc in such cbs as over-abounding, *over-
exciting, over-depressing, over-dazzling, over-inviting.*

2. 49. 8.   Possessive adjs (type 12) are o v e r s i z e d (cbs of this type are formed as synthetic cpds, see 2. 1. 5), *overhanded, over-parted, over-housed, oversparred,* and more occasional cbs such as *over-brained, over-leisured, overtimbered.* This group is less common while participial cbs are possible ad libitum.

2. 49. 9.   Other types have been less productive. Type 1 has chiefly formed technical terms, most of them coined in the 19th c. Exs are *oversight* 13. ., *overfall, overflow, overlay, overcut, overlook, overspill, overhaul, overlap, overshave, overthrust, overwash, overprint, overpass, overrun, overdraught.* Type 5 has *overshot* (wheel), type 8 *overnight* 'preceding night' (now chiefly AE), *overall(s), overdoor,* type 9 has *overage, overland, oversea, overnight.* Cbs of type 10 are *overknee, overbank, overside, oversea, overseas, overland, overarm, overhand, overhead, overleaf.*

Over is the only pt that has formed verbal cbs based on a prepositional relation. *Overwinter* get over the winter, winter' is rec. as far back as OE, but seems to have died out subsequently. The first modern quotation in OED is from 1895. There is also an obs. *overyear* (1574—1615).

2. 49. 10.   Cbs of the type o v e r - a n x i o u s cbs have double stress. It must therefore be asked whether *over* is not an independent word and the cb a syntactic group as the OED (s.v. *over* 28) asserts. As evidence it adduces the possibility of such a phrase as *over and above particular* which is, however, hardly StE now. *Over* is not a real adverb (though in some nothern B dialects it has this character, being the regular word for 'too', see OED *over* adv. 12). We could not use it as a synonym of excessively, nor could we repeat it as we can *too* or *very.* An isolated position (as in *Is he careful? Very*) is impossible with *over.* The type *over-anxious* may therefore be considered a word-formation type, despite its double stress.

2. 50.   through-, thorough-

continue OE *þurh* or rather its later variant *þuruh, through* representing *þurúh* while *thorough* goes back to *þúruh.* Both forms were used promiscuously till the 18th c. (see Jesp. MEG I. 5. 41) which accounts for the overlapping of the two forms in the same functions and also for the frequent use of either form in one and the same cb. But as *thorough* is now an adjective to all intents and purposes, combinations with it cannot be regarded as preparticle compounds in synchronic terms. Older coinings have been listed here for historical reasons.

The OE particle *þurh* was to a certain extent an inseparable prefix with vbs (*þurhfaran, -wunian* etc.), but those verbal cbs did not survive into ME. The few cbs we have today are back-derivations, as *thoroughbind* 'bind a wall by a stone which goes through' 1884, *thoroughdrain* 'drain a field by waterthoroughs'.

Of type 1 we have *thoroughfare* 1386, orig. with meaning 'passage', *throughput* 1922 which was coined after *output,* the plantname *thoroughwax* 1548 (after which was coined *thoroughwort* 1828).

In cbs of type 7 the particle was in OE common with meaning 'entirely, thoroughly', *þurhwacol* 'thoroughly awake', *þurh-hælig* 'very holy'. With adjs the type counts a few antiquated words, as *through-ripe, through-old, through-ho.*

Whereas cbs of the preceding types are chiefly technical terms, type 11 has formed both technical terms and words that are used by a wider public. In cbs of this type the particle has the meaning 'going through'. Examples are *through-passage* 1566, *through-toll* 1567, *thoroughbass* 'figured bass extending through a piece of music' 1662, the 19th c. technical terms *thoroughband, throughband, thoroughdraft, throughdraft, throughstone, throughjoint, throughbolt*.

Recent coinages all have the form *through*, as the traffic and travelling terms *through journey, through passenger, through ticket, through carriage, through train, through traffic* a.o. These cbs have double stress, i.e. they are not cpds, but syntactic groups consisting of adj plus sb. Recent *thrúwaỳ*, however, is a compound.

2.51.1. **under-**

With the meaning 'insufficiency' *under* forms possessive adjs of type 12, as *underhanded, undertoned, underhorsed, undermasted, underofficered, understaffed, understocked, underwitted, undersized, undersparred* (naut. term), u n d e r m a n n e d, *underlimbed*.

Type 7, i.e. cbs with underived adjs, has not, however, developed. There are a few rare words such as *under-ripe, underscrupulous, underhonest* (as opp. to *overproud* in Sh), but this is as far as the type goes. Latin has the corresponding type (see prf *sub-* for its imitations in English), but both French and German have developed overstatement types only (*überklug* resp. *surfin*).

2.51.2. Strongly developed are combinations of type 11. The shades of meaning the particle conveys are illustrated by the types *underwood* 'lower part of the wood', *undercurrent* 'underground current', *undergarment* 'garment worn beneath another', *underking* 'inferior king'. Examples of the type *underwood* are *underwood* 1325 which attracted *undergrowth* 1600 and, with a redundant particle, *underbrush* 1813, *underbush* 1891, *underscrub* 1894, *underchap* 'lower jaw' 1607, *underbody* 1621, *undercarriage* 1794, *underframe* 1855, *underleaf* 1873. More often, the conceptual basis is that underlying the type u n d e r - c u r r e n t 'second, but underneath . . .'. The oldest recorded instance of the type appears to be *undercroft* 'subterranean vault' 1395. Others are Modern English, as *underlip, underworld* and technical terms such as *undercliff, underboard, underdeck, underlayer, understratum, underdrift, underdrain, undertone*.

Current nouns denoting articles of clothing are *underclothing, underclothes, underwear, undergarment, underlining, undershirt*. Others may be formed ad hoc.

2.51.3. The particle is used with substantives designating holders of official positions, though chiefly in combinations of older date, such as u n d e r k i n g OE, *understeward, undertreasurer* ME, *undersecretary* 1687. Many more words are listed in dictionaries without, however, forming part of the common vocabulary. Combinations with *assistant* and *sub-* are more in vogue. *Assistant* is much more democratic than *under*, so in other than the old established terms we speak of *assistant treasurers, assistant secretaries, assistant clerks*, while in other cases usage prefers *sub-* (which is more technical and therefore free from any social tinge of subordinateness), as in *subtenant, subagent*. *Underdog* 1887 is socially tainted: originally denoting a losing dog in a fight, it is now exclusively used for a human victim of social injustice.

2. 51. 4. Other types are represented by such words as *undercut, underlay, underpass, understudy* (type 1). The last word is wrongly described by OED as a derivative from the vb *understudy*. Quite the reverse, for it is the noun which is the basis. This is indicated by the forestress on the verb (*to únderstùdy*). Formed as a verb, *understudy* could only mean 'study less than' (see above), which disposes of the OED explanation from the point of view of the significate also. Type 2 has formed such words as *undertaker, underwriter,* and *undercutter* (a woodcutting term). Examples of type 5 are *underhung, underslung, under-mentioned, undernamed, undersigned, undershot,* examples of type 8 *under-graduate* and *underground* (in various old and recent meanings). Types 9 and 10 are instanced by *underfoot, underage, underhand, underground, undersea,* while *underarm, underproof, underdip* (mining term), *underglaze* (colors = pottery term) represent type 10.

2. 52. up-

in OE had no tendency toward verbal combination (according to Harrison). However, the existence of PE *upspring,* orig. 'grow' (of plants) and *upbraid,* orig. 'fling up (an accusation)', both going back to OE, seem to point out that there were at least feeble attempts at verbal combination. The further development also testifies to the particle having established a pre-particle type with vbs before the decisive 15th c.; but it must be admitted that many of the ME verbal cbs occur in poetry only, and all these vbs suggest translations from Latin vbs: *upbregdan* is almost exactly L *supponere* used with the same meaning of 'assume, make an assumption', *uphold* corresponds to *sustinere, upturn* to *subvertere, upspring* to *subcrescere.* L *sub* as a verbal prf frequently conveys the meaning 'up', i.e. 'upward movement' as in *subveho* 'carry up', *subvolo* 'fly up', *subvolvo* 'roll upward' etc. On the other hand, OE *up* very often translated L *ex-, e-* when the meaning of the Latin vbs admitted of it, or was used as a translational element with simple Latin vbs which connoted the idea 'up'. In Harrison we find that *up dōn* renders *elevare, levare, tollere; up gān* translates *orior* (said of the sun), *up hebban* stands for *levare, elevare, exaltare, efferre, extollere; up weallan* renders *ebullire,* while *up rǣran* is the equivalent of *erigere.* It seems to me that the ME vbs were likewise translations of Latin vbs: *upraise* 'extol' is prob. L *extollere, uplift* would render *elevare; upheave* would render *elevare* and *extollere; uprear* would stand for *elevare* and *erigere. Upset* 1440 had for about two centuries only the meaning 'set up, establish' which would render L *erigere.* Even the comparatively recent vb *uproot* 1620 looks like a translation of L *eradicare,* but it may also be a prefix formation from vb *root* 'exterminate'. The vb first occurs in the sec. ptc form *uprooted* (1593) from which the full vb might be a backderivation. *Upend* 1823 'turn the end upwards' is derived from the phrase 'up end', and *upanchor* 1894 was coined after the same pattern. There have been many other verbal cbs since the ME period, as *upbear, upblow, upfill, uproll* etc. etc.; but they occur in poetry only and are not really common property of the language. They are cpds for the eye only, adapting for poetry what in reality is the vb followed by the respective particle in prose. Probably the only vbs that have general currency are *uphold, upturn, uproot, upset. Upset* in meaning 'overturn' is

recorded from about 1800, evidently under the influence of *upturn* and *uproot* with which it now forms a semantic group. It is needless to add that participial adjs are not derived from vbs, but represent type 5 cbs in their own right.

Less strongly developed is type 11, represented by the types u p s i d e 'upper side' and u p r o a d 'road going upward'. Both types existed in OE, but no cbs survived into the ME period. Of the type *upside* there are only a few cbs, the title word, rec. from 1611, and *upland* 1566 (as opposed to the lower parts of a country). The type *uproad* is represented by *upshot* 1531, orig. 'final shot in a match at archery', now signifying 'final issue'. All other cbs are 19th c. or later, as *upstroke, upgrade, uproad, upshaft, upwave, uprush, upbow*.

Of other types there are *upspring* OE, *uprise* ME, *upstart* 1555, but chiefly 19th c. words such as *upbeat, uplift, upthrow, upthrust, uptake, upkeep, upbreak, upburst* a.o. (type 1), *upbuilder, upclimber, upshutter, upstander*, all 19th c. technical terms of type 2 (in Scotch there are older formations, see OED); *upbringing, upbubbling, upgushing, upswelling, upsurging* a.o. (type 3); *upstanding* OE, and MoE cbs such as *upcreeping, upflashing, upstriving* a.o., but these participial cbs of type 4 have never been common.

The second ptc type 5 has been much more productive and current, though chiefly in poetry. Examples are *upset* ME, *upcast* LME, *upturned* 1592, *uplifted, upturned, uprolled, upswept, upflung, upblown* a.o.

Cbs on a prepositional basis are *upcountry* (types 8—10) 1810, *uphill* (8—10) 1548, *upriver* (9, 10) 1836, *upstairs* (8—10) 1596, *upstream* (9, 10) 1681, *uptown* (9, 10) 1838, *upstage* (9, 10), *upwind* (after *upstream*) 'against the wind' (9) 1838.

Uproar 1526 is fr. Du *oproer* 'confusion'.

PHRASES

2. 53. 1.   Types mán in the streét / breád and bútter / bláck márket / hánger-ón

In order to create a new lexical unit, language does not necessarily follow a pattern that is morphologically isolated. Any syntactic group may have a meaning that is not the mere additive result of the constituents. There are all degrees of semantic difference from a casual syntactic group (*black pencil*) to a syntactic group with a special meaning (*black market*: grammatical relation receding before lexicalization) to broken sign groups like *get up* consisting of distributionally independent speech units. The type *black pencil* would have no place at all in word-formation as it is a normal syntactical group, the type *get up* would not either as it is composed of pseudo-signs. We have excluded unmotivated groups from word-formation. The extreme cases are always easy to decide; it is those in between that offer difficulties.

We have thought fit to treat in word-formation combinations like *black market* where motivation is still obvious, whereas we have not included syntactic lexicalized groups in which synchronic analysis cannot discover any trace of motivation. The degree of motivation or non-motivation, however, is not always easily established, and borderline cases abound. It is with the express reservation that there are all degrees of motivation in lexical phrases that we have treated them in this marginal chapter of a book on word-formation. While *man in the street* is fully motivated, *man-of-war* is only motivated with regard to *war*, *master-at-arms* appears motivated to a limited number of speakers only. *Mother-of-pearl* and *mother-of-thyme* are as motivated as *butterfly*, i.e. by poetic comparison. We shall first give examples of nominal phrases.

Especially frequent are prepositional groups. Most cbs show the stress pattern of a syntactic group, i.e. the members have full stress. The stress indications of grammars and dictionaries vary insofar as the first members are often marked with lesser stress than the last member. This is very often the practice of the OED (followed by Webster) which is inclined to mark the stress as in *fèllow sóldier, dòg-in-the-mánger*. This obviously corresponds to an individual tendency and is not borne out by general usage. It is not denied that the first members are often heard with lesser stress, but this is a general phenomenon with syntactic cbs. The same variants occur with *gòod friend, prètty girl*, but the basic stress is not affected thereby.

2. 53. 2.   Type man in the street: *man about town, man of the world, master of ceremonies, maid of honor, matron of honor, lady in waiting, tenant at will, bag of bones, dog-in-the-manger, hog in armor, ticket of leave* BE (= *parole* AE), *sleight of hand, mother-of-pearl*.

The type is especially common with plant and flower names: *love-in-a-mist, love-in-idleness, mother-of-thyme, snow-in-harvest, snow-in-summer, snow-on-the-mountains*.

Some combinations have unity stress, either on the first member as the *-in-law* words (*father-in-law, son-in-law* etc.), *stock-in-trade*, the exocentric phrases *good-for-nothing, four-in-hand* and others, or on some other member, as *cat-o'-moúntain, cat-o'-níne-tails*.

2.53.3. The process of lexicalization is obvious in changes in the significant with those words also that are not characterized by unity stress. There is hesitation as to the place of the grammatical morphemes. The plural *-s* is often attached to the whole combination instead of to the determinatum (see Jesp. MEG II.2.53—57 and VI.8.83). This tendency is old. I will quote here the Quarto and Folio variants of King Lear IV.6.190 for *sons-in-law*: *sonne in lawes* (Q 1), *sonnes in law* (Q 2, Q 3), *Son in Lawes* (F 1), *Sonnes in Lawes* (F 2), *Sons in Laws* (F 3), *Sons-in-Laws* (F 4). The plural of *good-for-nothing* is *good-for-nothings*, not because "*goods-for-nothing* would suggest a wrong idea" (Jesp. VI.17.8 note) but because *good* is not the determinatum. The phrase is an exocentric combination.

2.53.4. Another phrase pattern is the type bread and butter. Exs are *brandy-and-soda, bubble-and-squeak* 'meat and cabbage fried up together', *carriage and pair, chaise and four, coach and six, cup and saucer, drum-and-fife, knife and fork* (plant name etc.), *lords and ladies* (plant name), *milk-and-water, pepper-and-salt* (kind of cloth), *whisky-and-soda* a.o.

The plurals, when they do occur, have no fixed pattern: we say *bread-and-butters*, but *cups-and-saucers*.

There are also adjs of the type, but they are few in number. Exs are *deaf-and-dumb, tried-and-true, rough-and-ready, hard and fast, cut and dried*.

Numerals like *five and twenty, hundred and twenty* etc. show the same syndetic formation.

2.53.5. Various other types are illustrated by bláck márket (cp. *bláckbìrd*), *great aunt, common sense, free trade, free wheel, stained glass, magic lantern* / *fólding dóor* (cp. *dáncing-gìrl*), *falling evil, Flying Dutchman, flying fish* / *bést séller* (cp. *néwcòmer*), *best man*.

2.53.6. A derivative from a postparticle verbal phrase (verb followed by a locative particle, see 2.58) is the type hanger-on. As the plural morpheme is not attached to the whole combination (cp. *rúnaboùts* as against *hángers-ón*), this type of phrase cannot be considered a compound. It is established by the Late Middle English period. Exs of this not very productive pattern are *looker-on, passer-by, listener-in, whipper-in, runner-up, diner-out, caller-out* 'one who announces the changes in steps in a dance' 1882 DA, *cutter-out* 'one who cuts out cattle from a herd' (western AE) 1910 DA, *puller-in* 'one who tries to induce passers-by to come into a store' (A slang) 1895 DA, *snapper-back* 'in American football, the player who pushes the ball in play' 1887 DA.

2.54. Types has-been / I.O.U (sentence phrases)

are such units as contain a finite verb. Cbs of this kind are not numerous in English and have no fixed pattern. Exs are *has-been, might-have-been, never-was*, the plant name *love-lies-(a)-bleeding* 'amaranthus caudatus', *I.O.U.* fr. *I owe you*. The first three exs. have forestress, the fourth has two stresses, the last has endstress or double stress.

2.55.1. Types king-emperor / queen mother / prince-consort (copulative combinations)

Coordinative combinations do not usually enter the forestressed compound type (see 2.1.17), but are treated as syntactic groups. The additive type king-emperor is used to denote persons who are two (or sometimes more) things at the same time. Shakespeare has such coinages as *giant-dwarf*, *king-cardinal*, *uncle-father*, and in other writers of the early 17th century we find combinations like *king-God* and *queen-bride*. However, the type gains currency in the 19th century only. Coinages have a literary character, as *queen-empress*, *cherub-patriarch*, *clergyman-poet*, *king-bishop*, *king-poet*, *king-pedagogue*. Present usage tends to restrict the pattern to combinations denoting one who combines two professional or quasi- professional capacities, as in *historian-biographer*, *actor-director*, *actor-manager*, *author-producer*, *pianist-composer*, *composer-director*, *composer-conductor*.

Recently, the jargon of commerce has utilized the type in such coinages as secretary-stenographer, *secretary-treasurer*, *producer-distributor*, *contractor-builder*. We also find journalese combinations of more than two members: *actor-producer-director*, even *soldier-statesman-author-orator* (used in an editorial summing up of an article on Caesar by Robert Graves, The New York Times Magazine, March 10, 1957, p. 17).

2.55.2. There are other cbs in which the second-word is notionally dominant while the first-word is its *apposition*. Exs of this type are queen mother, *merchant-tailor*, *gentleman-commoner*, *gentleman-farmer*, *gentleman-usher*, the archaic words *merchant-adventurer* and *merchant-venturer*, such cbs as *sword-cane*, *desk-table* a.o.

The reader may sometimes find that one or the other instance may be interpreted either way. Transitions are, as everywhere, fluctuating. Is OE *werwolf* an additive or an appositional cpd? A *queen mother* is 'a mother who is at the same time a (one-time) queen', a *queen bee* is 'the bee which is the queen of the hive'. Kluge's explanation for appositional cpds "im allgemeinen erhält das 1. Wortglied durch das 2. Glied eine appositionelle Verdeutlichung" (§ 93) is misleading. It is quite contrary to the character of compounding that the first-word should be the main part and also against the linguistic principle (in Germanic languages) that the determinant precedes the determinatum.

2.55.3. Though the two members are notionally coordinated, there is a marked difference of importance between them, as is seen in *prince-elector*, *prince-bishop*, *prince-consort*, *prince-regent*, still more in *earl-marshal* (which originally was *marshal* only). The bearer of the respective title is an elector, bishop, consort, regent, marshal who is a prince (earl) at the same time. In *lieutenant-colonel*, *lieutenant-commander*, *lieutenant-general*, *lieutenant-governor*, obs. *lieutenant-capitain* we have appositional cbs with the first-word having kind of prefixal value, comparable to *vice-*. Holder of such titles are no longer felt to be 'lieutenants', though this was the origin of the titles. They always take the group *-s* in the plural.

2. 56.   Types **write down** / **come in** (verbal phrases)

With verbal phrases we observe the same state of affairs as with nominal groups. There are fully motivated combinations such as *write down, come in, go out* at one end of the line, and wholly unmotivated groups of pseudo-signs such as *get up, give up, carry out* (a plan), at the other end. Particles may develop a class meaning in combination which they do not have as independent words. Thus, *up* conveys the perfective or intensifying meaning 'to the end, completely' to verbs where the idea of a final aim or result is implied, as in *eat up, drink up, fill up, finish up, clear up, beat up, break up, tear up.* Many motivated phrases are entirely degrammaticalized (lexicalized), i.e. any modification can only apply to the whole combination while the constituents are no longer susceptible of characterization. *Cut short, take to pieces, bring to light, take into consideration, give the sack* belong here. Others are less lexicalized in that their elements still admit of grammatical modification. Such phrases as *take care, take notice, pay attention* fall under this group: *great care should be taken, he was not taken any notice of, no attention at all was paid* illustrate this point.

6*

III. PREFIXATION

The term 'prefix'

3. 1. 1.   The definition of the word 'prefix' seems to meet with difficulties[1]. The older grammarians (Hermann Paul, Mätzner, Wilmanns) do not know (or, as Wilmanns, do not consider) the term; they treat prefixing as part of compounding. Kluge (Abriß der deutschen Wortbildungslehre) introduces the term on account of the importance of these particles though prefixing "gehört eigentlich in die Lehre von der Wortbildung durch Zusammensetzung" (71). The word is now firmly rooted, in linguistic terminology, but it is used in various meanings. The OED uses the word for almost any prepositive particle, but employs the term combining form for various pre-particles without giving a definition of either. Jespersen gives no definition whatsoever, while Koziol, in his introduction, restricts the use of the word prefix to particles which have no independent existence as words, but in his treatment he classes locative particles also among the prefixes. On the other hand, many prefixes are missing in his book. Kruisinga gives the prefixes only a few pages in his Handbook, saying that a prf "really has the same function as a word used as the first element of a compound" (1596). This standpoint is hardly acceptable. A dependent morpheme cannot be treated on the same footing with an independent word.

Prefixes of native and foreign origin

3. 1. 2.   We call prefixes such particles as can be prefixed to full words but are themselves not words with an independent existence. Native prfs have developed out of independent words. Their number is small: *a-, be-, un-* (negative and reversative), *fore-, mid-* and (partly) *mis-*. Prefixes of foreign origin came into the language ready made, so to speak. They are due to syntagmatic loans from other languages: when a number of analysable foreign words of the same structure had been introduced into the language, the pattern could be extended to new formations i.e. the prf then became a derivative morpheme. Some prfs have secondarily developed uses as independent words, as *counter, sub, arch* which does not invalidate the principle that primarily they were particles with no independent existence. The same phenomenon occurs with suffixes also.

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[1] H. Paul, Deutsche Grammatik. Band V. Teil IV. Wortbildungslehre. Halle 1920. — H. Mätzner, op. cit. Bibl. I. — W. Wilmanns, op. cit. — F. Kluge, Abriß der deutschen Wortbildungslehre. Halle 1925. — W. Henzen, op.cit. — O. Jespersen, op. cit. — H. Koziol, op. cit. — E. Kruisinga, A Handbook of Present-Day English. Part. II. Accidence and Syntax 3. Fifth edition. Groningen 1932.

Changes brought about by the Norman Conquest

3. 1. 3.   The system of English word- formation was entirely upset by the
Norman Conquest. This does not mean that the present system is due to the
Normans, but the Normans paved the way for the non-Germanic trend the
language has since taken. It is due to the continuous contact with France
that English borrowed so many words from French which, as a matter of
course, occasioned the rise of prfs and sfs out of these loans. And it is due to
this Romanization, through French, of the English vocabulary that Latin
words could so easily be adopted. The language took to wholesale borrowing,
a method which meant an enormous cut-down on the traditional patterns of
wf out of native material. For words which are prefix or suffix formations in
German we have loans in English: *Befestigung/fortification; Verteidigung/de-
fense; Betrachtung/consideration, contemplation; Unternehmung/enterprise; An-
griff/attack; Enttäuschung/disappointment; Entstehung/origin* etc. etc. We
cannot explain everything through Romance or Latin influence. Surely there
are other elements which have played a role, and we are far from being able
to solve this problem entirely by pointing out one or two auxiliary elements.
Some of the old prfs disappeared because they were practically too weak
phonetically, as *æt-, ed-, oþ-, ymb-*. The prf *for-* had lost its sign character by
the ME period. It is suggested that homophony with *fore-* may have played a
part. As early as ME, the connection between prf and simple vb was lost in
forget, forgive, forbid, forsake (OE *sacan* 'strive, contend' had died out) and no
common nuance of meaning united *forgo, forswear, forspend*. The intensive
meaning was perhaps felt in *forgather, forbear* (still dialectal with meaning
'endure'). The final result was that English lost a prefixal device for expressing
the idea of intensity, perfectivity with vbs. This function is now performed
by postpositive particles, chiefly *up* and *out* (*finish up, use up, burn out*).
English has no prefixal equivalents for G *er-, ver-, zer-*. What Koziol (259)
means by saying that "als Konkurrent (of separative *to-*) trat seit me. Zeit
auch die lat. franz. Vorsilbe *dis-* auf" is unintelligible. The prf *dis-* never
stands for G *zer-*.

The development of post-particle verbs

3. 1. 4.   An important factor which stopped the development of prfs out of
native material was the tendency to form post-particle vbs. This development
is achieved by the 14th c. All locative particles with vbs were more and more
frequently placed after the verbs, except those which were frequently used
with a non-locative meaning in combination with verbs and therefore became
established as inseparable verbal prefixes. As far back as OE, *fore, over,* and
under had developed prefixal character. But this development affects verbal
prefixes only. It helps explain, for instance, why such types as G *hintertreiben,
umzingeln, durchdringen, widerstehen* could not develop from ME onwards.
Curme[1] explains the rise of post-particle verbs from a tendency to give the
particle more stress. To judge by the results now long reached, I think that

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[1] The Development of Verbal Compounds in Germanic. Paul and Braune's
Beiträge 39 (1914) 320 ff.

the rise of the type is tied up with the normalizing of the position of locative subjuncts in general: *he went out* (*in, under* etc.) is parallel to *he went out of the room, he went home, he went there* etc. Adverbs of indefinite time (*never, often* etc.), of manner (*quietly, slowly* etc.), of degree (*almost, entirely* etc.), of modality (*hardly, certainly* etc.) may immediately precede the vb, but adverbs of place always follow the vb (except for such sentences as *I here give a few examples* where the locative sense of the pronominal adverb is considerably weakened).

Prefixing on a Neo-Latin basis of coining

3. 1. 5.   There are many prfs, chiefly used in learned words or in scientific terminology, which have come into the language through borrowing from Modern Latin, as *ante-, extra-, intra- | meta-, para-* etc. The practice of word coining with these particles begins in the 16th c., but really develops with the progress of modern science only, i.e. in the 18th and esp. the 19th c. The patterns of coining are NL (though some of the types are already OGr or AL). With these particles there is a practical difficulty. They may represent 1) such elements as are prefixes (in the above meaning) in Latin or Greek, as *a-* (*acaudal* etc.), *semi-* (*semi-annual*), 2) such elements as exist as prepositions or particles with an independent word existence, as *intra, circum | hyper, para*, 3) such as are the stems of full words in Latin or Greek, as *multi-, omni- | astro-, hydro-*. This last group is usually termed 'combining forms' (OED, Webster). In principle, the three groups are on the same footing from the point of view of English wf, as they represent loan elements in English with no independent existence as words. That *macro-, micro-* a.o. should be termed combining forms while *hyper-, hypro-, intro-, intra-* a.o. are called prefixes by the OED, is by no means justified.

3. 1. 6.   Only such pts as are prefixed to full English words of general, learned, scientific or technical character can be termed prefixes. *Hyper-* in *hypersensitive* is a prefix, but *hyper-* in *hypertrophy* is not, as *-trophy* is no word. We cannot, however, undertake to deal with all the prepositive elements occurring in English. Such elements as *astro-, electro-, galato-, hepato-, oscheo-* and countless others which are used in scientific or technical terminology have not been treated in this book. They offer a purely dictionary interest in any case. In the main, only those pts have been considered that fall under the above groups 1) and 2). But we have also included a few prefixes which lie outside this scope, as prfs denoting number (*poly-, multi-*), the pronominal stem *auto-* which is used with many words of general character, and pts which are type-forming with English words of wider currency (as *crypto-, neo-, pseudo-*).

3. 1. 7.   There is much confusion in the matter of wf by means of the combining forms. The OED, by using the term, avoids the discussion of their exact relation to English wf and does not properly distinguish between these forms used as prfs with English words and their use in what we might call compounding on a NL basis of coining (cp. e.g. *sub-, super-* in OED). Koziol and Jespersen speak of prefix formations with cbs like *hypergamy, polygeny, polygyny, pantology, pantoscope*. The distinction I make is not pedantry. It is of prime

importance in the defining of the stress patterns. The combining form used as a prefix involves stress variations between 'full stress/middle stress' and 'middle stress/full stress', as in *múlticỳcle* and *mùltispécialist*, but the place of the stress is invariably on the same syllable. Stress shifting, as in *multíparous, multísonous, pantólogy, polýgeny* etc. shows that the respective cbs were coined not as English prefix formations but as NL cpds. On the other hand, the fact that a certain cb fits into a formative stress pattern does not prove the word a coinage on a native basis: *multisect* is NL *multisectum, multiflorous* is LL *multiflorus*, no **sect* (in the sense required) or **florous* exist as words in English.

I have not dealt with compounding on a NL basis of coining as it would have involved the discussion of the patterns of Latin and Greek wf, a subject far beyond the scope of this book.

3. 1. 8.   In the same degree as the second-word is felt to be an independent (though learned or scientific) word, the whole originally Latin-coined cb tends to become analysable as a coinage on a native basis. The effects of such re-interpretation on the stress pattern have already been pointed out. Semantically, this actualization is expressed by the extension of foreign types to common English word material. If we take, for instance, the pt *post-*, we see that it originally coins words only on a Latin basis, formally as well as notionally (*post-classical, post-diluvian*). But as the second-words existed independently, the cbs were no longer analyzed on a Latin, but on an English basis, and the type *postwar years* is the result of the new analysis. Similar is the case of extended bahuvrihi adjs, as *multi-angular* 'having many angles' which led to the type *multi-bladed*.

3. 1. 9.   The actualization of a Latin-coined cpd is impossible, we have seen, when the second element is no English word. Actualization is therefore excluded with cbs whose second parts are not words in Latin or Greek either, as with the following terminal elements which occur as elements of Latin or Greek cpds only, never alone: *-fluous, -fic, -ferous, -gerous, -loquous* / *-phagous, -philous, -phorous* / *-cephalous, -gynous, -gnathous, -logous, -merous, -phyllous, -stomatous* etc. (direct from NL), or *-gamy, -geny, -logy, -stomy, -trophy* etc. (taken from French). Such elements have no chance of becoming words in English, and with the exception of trisyllabic constituents, (as *tri-céphalous*) have no stress. The stress is always on the syllable preceding them.

3. 1. 10.   As my method is primarily synchronic, I have considered as English coinages such words also as are adaptations of foreign words provided they have been actualized (reinterpreted) in English. That *subprior, transfluvial, multidentate* by origin represent L *subprior, transfluvialis, multidentatus* may be of historical interest; but what matters linguistically is that these words are analysed as English coinings by the present-day speaker. On the other hand, such words as *digonous, dimerous, dipterous* (repr. NL words in *-us*) whose second elements do not exist as words in English, have remained outside a formative pattern which is shown by the pronunciation [di] and the stress on the first syllable (as compared with regularly stressed *dicóccous, dipólar*). Partly actualized are e.g. *multivalent* and *polyvalent*. They are now chiefly

accented as *mùltiválent, pòlyválent*, the second element being associated with *valence, valency*. In other cases, there can be no actualization for obvious reasons: *multivocal* has no connection with *vocal*, but is coined after *equivocal, univocal*; *monótonous* is connected with *monótony*, but that the second element is ultimately that which we have in *tone* has not become a linguistic reality.

3. 1. 11.   Most prefixes are combined with English words without any formal changes. An exception is made by prfs of Greek origin and negative *in-* which is Latin. In accordance with the linguistic laws of Greek, *a-, anti-* (in scientific nomenclature), *epi-, macro-, micro-, mega-, meta-, para-, proto-, syn-* undergo changes in certain positions which are indicated under the respective prfs. But on the other hand we observe that the naturalization of a foreign type brings about parallel phonetic changes. The phonetic changes a prefix undergoes according to the linguistic laws of the language from which it was taken tend to be disregarded when the type has become a native pattern and is analysed as a cb of two English words. The before-mentioned particles of Greek origin very often show a tendency to keep their full form, regardless of a following vowel. Regularly we expect *antalgic, antemetic, aut-erotism, prot-organism, mon-acid*, but *antiallergic, antiapoplectic, auto-erotism, proto-organism, monoacid* (besides *monacid*) represent the now stronger tendency. For more instances see the respective prefixes.

3. 1. 12.   While there is little wffb with formal changes, it is noteworthy that most of the prfs of Latin and Greek origin have a pronounced learned, scientific or technical character and are, in consequence, used with learned words of Latin or Greek origin only. Chemical terms are often fabricated words and are NL insofar as they are composed of elements found in Modern Latin, though they may be loans in the latter (as *alcohol, benzoe*). To these also, prfs of Latin and Greek origin are attached, as will be seen under the respective prfs and sfs. Here I will point out only such words as *parabenzene* and *paraldehyde*.

Competition between prefixes

3. 1. 13.   There is often competition between prfs as there is between sfs and independent words: *over-* and *out-* sometimes overlap, there is overlapping between *un-* (neg.) and *in-, un-* (reversative), *dis-* and *de-*, between *ante-* and *pre-, super-* and *hyper-, super-* and *trans-, super-* and *supra-*.

The conceptual relations underlying prefixed words

3. 1. 14.   A pre-particle or prefix combination may be based on three different conceptual patterns and accordingly present the prefix in three functional aspects: 1) the prefix has adjectival force (with sbs, as in *anteroom, archbishop, co-hostess, ex-king*); 2) the prefix has adverbial force (with adjectives and verbs, as in *unconscious, hypersensitive, informal, overanxious | unroll, rewrite, mislay*); 3) the prefix has prepositional force (as in *prewar years, postgraduate studies, antiaircraft gun | afire, aflutter | anti-Nazi, afternoon | encage*: sbs and vbs

must be considered syntagmas with a zero determinatum, the cbs *anti-Nazi*, *afternoon, encage* being the respective determinants).

The preceding conceptual patterns are important in the determination of the stress: while a cb based on an adjunct/primary relation tends to have two heavy stresses (as in *árch-énemy*) or may even have the main stress on the prefix (as in *súbwaỳ*), the prf has not more than a full middle stress in the other types.

The phonemic status of prefixes

3. 1. 15.   Prefixes are semi-independent morphemes which behave like first-words of compounds in that they are followed by an open juncture: they do not fuse syllabically with their respective bases (*suborn*, but *sub-order, distinct*, but *dis-tasteful* where aspiration characterizes the *t* following *dis-* as word initial; and in *mis-state* we have a geminated *s* which can occur at morpheme boundaries only; cp. *dis-armament* [s] and *disaster* [z].

With the exception of /ɛn-, ɛm-/ whose variants are phonetically predictable, prefixes have the same phonic form in all conditions: *sub-* is always [sʌb] whether it has a middle stress as in *sùbcónscious* or a heavy stress as in *súbwaỳ* (cp. the unit word *subvérsion* as opposed to an (artificial, but possible) *sùb-vèrsion*), *re-, de-* are always [ri], [di]. A prefix has no allomorphs which clearly distinguishes it from graphically similar etymological elements; in *recognize* with [rɛ] and *relax* with [rɪ] *re-* is a mere etymological element of non-composite words.

3. 1. 16.   The semi-independent, word-like status of prefixes also appears from their treatment in regard to stress. With the exception of regularly unstressed *a-* (as in *afire, aflutter*), *be-* (as in *befriend*), and *em-, en-* (as in *emplane, encage*) all prefixes have stress. To illustrate this important point a comparison with non-composite words of similar phonetic structure will be useful. If we compare the words *rè-fíll* and *repéat*, morphemic *re- /ri/* in *re-fill* is basically characterized by presence of stress whereas non-morphemic *re-* [rɪ] is basically characterized by absence of stress. This is proved by the fact that under certain phonetically unpredictable circumstances, the phonemic stress of *re-* in *rè-fíll*, though basically a middle stress, can take the form of heavy stress whereas phonemic absence of stress can never rise to presence of stress. *They rèfílled the tank* may become *they réfìlled the tank* (for the sake of contrast) or *they réfìlled the tank* (for emphasis), but no such shift is conceivable for mono-morphemic *repeát, incíte, prefér* etc. which invariably maintain the pattern no stress / heavy stress. One might object that in cases such as *rèpresént, ìnter-míssion, àcadémic* non-morphemic elements receive a middle stress. They do, but for purely rhythmical reasons: at a distance of two syllables before the heavy stress, a basically unstressed syllable receives a middle stress. This is the only secondary stress marked in most dictionaries (OED, Webster, Kenyon-Knott; Jones marks most prefix cbs with double stress). From the phonemic point of view, however, this stress has no value at all. It is a rhythmically conditioned variant of the lowest degree of stress (= absence of stress) and weaker than the middle stress of e.g. *rèconstrúct*. I disagree with Newman[1] who classes this type of stress as a variant of middle stress (179 and 184).

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[1] Stanley S. Newman, On the Stress System of English (WORD 2. 171—187. 1946).

3. 1. 17.   The basic form of stress which prefixes assume is that of the middle stress. The position of prefixes is similar to that of personal pronouns and possessive adjectives in that they are likewise more often than not used in conjunction with words functionally and semantically more important than the pronouns (*mỳ bróther, wè líke*). Therefore we cannot assign the basic degree of heavy stress to prefixes though, on principle, the form of heavy stress is open to any morpheme that bears a phonemic middle stress.

3. 1. 18.   Deviations from the basic stress pattern are conditioned by various factors.

1) We have already pointed out the importance of the underlying concept. With many speakers, the middle stress tends to become a heavy stress when the prefix stands in adjunctal relation to the following substantive, especially when the middle stressed syllable of the prefix is separated from the heavy stressed syllable of the basis by an unstressed syllable: *súb-commíttee, súper-híghway, crýpto-cómmunist, árch-énemy* (with *arch-* cbs two heavy stresses seem to be the rule).

2) When a monosyllabic prefix immediately precedes the stressed syllable of the basis, the usual pattern is, however, that of middle stress/heavy stress: *cò-hóstess, èx-présidént*.

3) In the event of a monosyllabic basis the prefix shows a growing tendency to receive the main stress while the heavy stress of the basis is shifted to a full middle stress: *súbwaỳ, prévièw, prótocònch, pseúdobrànch*.

4) The basic full middle stress of the prefix in adverbial function may be reduced to a lighter variant of middle stress when a monosyllabic prefix (*de-, re-, un-, mis-* etc.) finds itself placed after an unstressed syllable and immediately before the heavy stressed syllable of the basis (e.g. *to unseát a senator, to mismánage it*). This is a purely rhythmic phenomenon, and many speakers avoid it by giving the prefix the main stress if the interval from it to the next heavy stress makes it possible (as *to únseàt the sénator, to únveìl the mónument*, but not in *to mismánage it*). This rhythmic weakening of the full middle stress is probably what has moved the writers of most dictionaries (OED, Webster, Kenyon-Knott; not Jones, see above) to mark these prefixes as unstressed when the heavy stressed syllable of the basis immediately follows, giving a secondary (i.e. phonetic, rhythmic) stress only when the distance between the prf and the heavy stressed syllable of the basis is at least one syllable (*defróst*, but *dèmaterializátion; miscoúnt*, but *misconcéption* etc.).

5) It is probably due to the implicit idea of contrast that cbs with the following prefixes always have the main stress on the prefix: *ante-* (*ánterroòm*), *anti-* (*ántichrìst*), *counter-* (*coúnterattàck*), *fore-* (*fórefàther*), *step-* (*stépfàther*). This tendency is most fully developed with locative particles: *oútpàtient, úndercùrrent, býpròduct, óvercoàt*. Two-stressed syntactic cbs (e.g. *in áfter yeàrs, an óver cópy*) are far less frequent than forestressed compounds.

6) Implied contrast also accounts for the regular forestress in such words as *súpermàn, súperfòrtress*. For the same reason many speakers usually stress the particle in *súb-òrder, súb-fàmily, súb-spècies, súb-tìtle*. This stress pattern,

however, is unstable. The word *subcommittee* which is so much used in these days, is pronounced either as *súbcommìttee* or *súb-commìttee*.

7) Despite traditional stress indications in OED stress alternation is now morphophonemic with *re-* and *inter-* cbs to distinguish a verb from a substantive. It occurs when the basis is monosyllabic: *rèfíll* vb ∼ *réfìll* sb, *rèmáke* vb ∼ *rémàke* sb etc., *ìnteráct* vb ∼ *ínteràct* sb, *ìnterpláy* vb ∼ *ínterplày* sb etc.

3. 2. 1.   a- /ə/ (type ablaze)[1]

The prf goes back to the OE preposition *on, an* (= PE *on*). It is prefixed, on the basis of a prepositional relation, to sbs, adjs, and vbs. It conveys the meaning 'in a state or position of . . .'. In combination with vbs it is approximately an equivalent of the *-ing* (*ablaze* = *blazing*), but the cb is, as are all *a*-derivatives, only in predicative use. It had, by the ME period, developed into *a-*, as in *ablaze, abrood, aday(s), afield, afire, afoot, aground*, obs. *agrief, ajar, alank, alee, alight*, obs. *arank*, obs. *aroom* 'at a distance', *arow, aside, asleep, athrong, awork*. There were several words which could also be apprehended as derived from vbs, as *ablaze, aburst* 'in a burst of rage', *awane, aswoon* (which may orig. be the ptc *geswōgen*, as the OED supposes), *awork*. Subsequent usage has preferred deverbal coinages, all from intransitive vbs, though denominal derivatives have likewise been made. Many of the roots are monosyllables, others are disyllabic. But of the latter only vbs in *-er, -le* occur, most of them frequentative vbs. Outside this group is *aglisten* (q. Je VI. 7. 52). I give the examples in chronological order. From the 15th c. are recorded *agaze, acrook* 'crookedly', from the 16th c. *ajar* 'jarring', *atilt, aflaunt, acry, askew* (fr. *skew* 'move sideways'), *aweary*. From the 17th c. date *adrift, agape, aslug, astoop, asoak, astride, aswim, awrack*, from the 18th c. *astraddle, asquat, atwist*. The 19th c. was exceedingly productive: *abask, acock* 'in a cocked position', *adance, adangle, aflicker, aflower, aflutter, afoam, agasp, aglare, agleam, aglimmer, aglitter, aglow, agush, ajog, aripple, aseethe, ashake, ashiver, ashine, asimmer, asmear, asmoulder, asnort, aspout, asprawl, aspread, asprout, asquirm, astare, astir, aswarm, asway, asweat, aswing, athrill, athrob, atingle, atremble, atumble, awash, awave* (Browning), *awhir, awhirl, awink, awobble, awreck*.

3. 2. 2.   Denominal derivatives after the ME period are *ahorseback* (arch., 1490), *ashore, a-tiptoe, a-week, aflame* (16th c.), *aheight* 'aloft' (arch.), *atop* (17th c.), *awest, awing, aheap, ajoint, adust, ahunt, astrain, arake* 'on the rake, inclined' (19th c.). We have a good number of nautical terms, as *aweather* 1599, *atrip* 1626, *aweigh* 1627, *astern* 1627, *asterboard* 1627, *apoop, aquarter, asea, asouth, astay, awest* (all 19th c.). Dialectal or regional are *aglee, a-plague* 'plagued' (q. in ADD).

In ME a few derivatives from adjs were coined, as *abroad, acold, aflat, aleft, aloud, awrong, awry*. But the type has not become very productive. MoE is *asudden* 1865, the OED quotes *adeep* from E. B. Browning. In ADD I find *ahungry* and *aloose*.

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[1] J. H. Neumann, A nineteenth century 'poetic' prefix (Modern Language Notes LVIII, 1943, 278 ff.).

3. 3.   a- /e, æ/ (type asymmetric)

This is an adjectival prf. It forms words along the lines of wffb, the terms belonging in the main to Nat. History or Medicine. The prf represents Gr *a-* (alpha privativum) which is ultimately the same as E *un-*. In Greek it originally and chiefly formed desubstantival adjs (type *ámorphos* 'formless'), then also a few contradictory opposites of simple adjs (t. *ásophos* 'unwise'). These are the types that interest us. A few passed into Late Latin. Neo-Latin took up the type, and the phraseology of science appended the prf to Latin stems also. Formally, *a-* is changed to *an-* when standing before a vowel, according to the linguistic laws of Greek (*an-axios* is the opposite of *axios*). The English coinages are all derivatives from a substantival basis, though practically they are often analysed as opposites of unprefixed adjs. The meaning of prefixed words is therefore either 'without, devoid of, not affected or characterized by what is denoted by the root' or 'not . . .'. Examples: *acapsular, acalyculate, acranial, acardiac, achromatic, achromous, acaulescent, acaulose, acaulous, acauline (caulis* 'stem, stalk'), *acaudal, acaudate, aglossal, aplacental, afebrile, apyretic, aseptic, acritical, amnemonic | anelectric, anharmonic, anhydrous.*

Outside the before-mentioned branches of science are *amoral, atonal, atemporal* 'timeless', *avolitional, asymmetric.*

A substantival coining is *asynchronism* 'non-correspondence in time' 1875, but *asymmetry* is OGr *asymmetria.*

The words are almost all 19th c. A few are older, as *asymbolic, -al* 1660, *asymmetric* 1690, *asyllabical* 1751.

3. 4. 1.   ante- /'ænti/

is a MoE prf which forms learned or scientific sbs and adjs, both on a native and foreign basis of coining. It conveys the meaning 'fore-, pre-, preceding, coming before . . .'. English owes the type to ML. Classical Latin used *ante-* chiefly with parasynthetic adjs, as *ante-lucanus, -meridianus, -muranus, -nuptialis, -pilani, -signani* 'troops standing before the pilani resp. the signa', *-urbanus.* There were also deverbal sbs and adjs, as *anteoccupatio, anticipatio, antepagmentum, antependulus* and participial sbs, as *antefactum, antefixum.* For the English type a n t e r o o m, AL cbs such as *antepes* 'forefoot, forerunner', *antecanis* 'foredog' (name of a stellar constellation), and ML *antetemplum* may have served as patterns.

3. 4. 2.   English has, from about 1500 on, tried coinages, but they have never become popular. *Fore-* and, since the 19th c., *pre-* have been stronger rivals. Examples are *antetheme* 1494—1561 'text prefixed to a sermon as its theme' obs., *antedate* 1580, obs. *antefact* 1623, *antetype* 1612, *antenumber* 1626, *anteporch* 1624, *antenoon* 1686, *ante-eternity* 'quality of having existed before eternity' 1678, *ante-court* 1691, *ante-stomach* 1691.

Architectural terms are *ante-chamber, -chapel, -closet, -choir, -room, -hall, -church, -portico* a.o. (see also prec. group). Anteriority is expressed in *antedawn, -spring, -noon, -taste, -predicament* and a few others already mentioned.

The earlier spelling is often *anti-* which may render the pronunciation [ænti]. But a similar confusion we meet with in French, and Latin has *ante-*

pagmentum beside *antipagmentum* (the reverse is *antechristus* for *antichristus*). That the ultimate identity of *anti-* and *ante* (the basic meaning is 'opposite') cannot have been felt hardly needs saying. Probably, the French and English spellings *anti-* are due to the influence of Italian where *ante-* has become *anti-* (*antiporta, anticamera*).

3. 4. 3. Latin-coined adjs based on a preposition/object relation belong chiefly to the 19th c. Only a few words are older. The concept of place ('situated in front of . . .') underlies such cbs as *ante-caecal, ante-orbital, ante-pectoral*, all 19th c. The temporal sense 'occuring, existing before . . .' is found in *antediluvian* 1646, *antemeridian* (L) 1646, *antepaschal* 1660, *antemundane* 1731 and 19th c. words like *antebaptismal, antechristian, anteecclesiastical, antehistoric, antenatal* / *ante-Gothic, ante-Mosaical, ante-Norman*.

This use has led to the combination of *ante-* with preadjunctal substantives, as in *ante-Communion Service, ante-sunrise light, ante-war taxation* (19th c.). Such combinations are now being outrivalled by formations with *pre-*. A partial reason for this is probably the homophony of *ante-* and *anti-*.

Ante- has the main stress in substantival cbs, in adjectival and preadjunctal cbs the main stress is on the root.

3. 5. 1.   anti- /'ænti, 'æntai/

is ultimately OGr *anti* 'counter, opposite, instead', found in loans such as *antipodes* ME, *antiphon* 1500, *antithesis* 1529, *antiphasis* 1533, *antidote* 1543, *antilogy* 1614 a.o., which came into English either directly from Greek or indirectly through the medium of Latin. The real English prf *anti-* is, however, only in part due to OGr words. The OGr prf was used with vbs and deverbal nouns, a usage that has not been imitated in English. The OGr denominal coinages are different in type from PE formations, as we shall see. We have words such as *antistrátēgos, antibasileús* where the particle has the meaning 'acting' (cp. L *proquaestor* with its Gr equivalent *antitamias*). Latin adopted *anti* in a few cbs: Caesar's *Anticato* is 'a reversed Cato (i.e. the book entitled *Cato*)'. Of the same type are Eccl. *antitheus* = Gr *antitheos* 'a reversed god, i.e. the devil' and Gr *antichristos* (1 John 2, 18) which passed into Latin as *Ante-Christus* 'a rival (if pseudo-) Christ'. This word is the first *anti-* word in English and has become the archetype for a whole group. E a n t i c h r i s t is first rec. about 1300 in spelling *anti-* or *ante-christ* and represents OF *antecrist*. The next coinages on the pattern also belong to the religious sphere, all denoting the rival candidate of the opposite party: *antipope* 1579 (after ML *antipapa*), *anti-deity* 1602, *anti-creator* 1642 (Milton), *anti-Messiah* 1677, *antigod* 1684. Not religious are *antiking* 1617 and *anti-duke* 1872. Other words are *anti-apostle, -creation, -music, -poison* (17th c.), *-religion, -hero, -priest* (18th c.) where the implication is likewise that of 'spurious', or 'of the reverse kind', no longer in use. In the second half of the 16th and in the 17th c. the particle was pretty much in use with non-personal sbs (see NED) with meaning 'counter, opposing', but such formations have not subsisted. There is *antimask, -masque* 1613 with the implication 'not the real one, but the grotesque interlude between the acts of the masque', a counter-masque so to speak. The word *antipole* 1822 may belong here, too.

3. 5. 2. A 17th c. development is the prepositional type anti-Calvinist 'one who is against Calvin'. Examples are *anti-Becketist, anti-Bonapartist / antialcoholist, anticommunist, antifascist, antifederalist, antilegalist, antinationalist, antisocialist / antisabbatarian, antitrinitarian / antimason, antinazi, antipuritan, antisemite.*

The object of the preposition may be a personal name, as in the type word, or a common substantive, as in *antialcoholist.* Many combinations admit of double analysis: *anticommunist* may be interpreted as *anti-commun(ism)-ist* with the suffix of the determinant group left out before the determinatum- *ist*, or as a derivation by a zero morpheme from the prepositional group *anti-communist*. Clear zero-derivatives are cbs of the *antinazi* type.

3. 5. 3. Early recorded adjs are *anti-Platonic* 1638, *antiprelatical* 1641, from the second half of the 17th c. *antiecclesiastic, antifanatic, antiministerial, antiroyal / anti-Arian, anti-Socinian, anti-Zwinglian*. The type has been productive ever since, giving rise to *antibiblical, anticlerical, anticommercial, antiintellectual, antitraditional / anti-American, anti-British, anti-Semitic / antiforeign* and others.

3. 5. 4. Parallel to the type *anti-Calvinist* is anti-Calvinism which does not seem to be older than the 17th c. The title word and *anti-Arminianism* are recorded 1674, but most other formations are 19th c. or later words, as *antimoralism, antipatriotism, antirealism, antisemitism.*

3. 5. 5. As the result of *anti-* preceding an adjective we get the particle prefixed to pre-adjunctal substantives as in anti-court (party). The title word is probably the earliest example (rec. c. 1650) while most others belong to the 19th c.: *anti-administration, anti-immigration, anti-labor, anti-slavery, anti-trust, anti-vaccination, anti-vivisection, anti-war* (law, league, movement, party etc.). The type has paved the way for similar combinations with other particles (see *ante-, inter-, intra-, post-, pre-, pro-, sub-, trans-*), a 19th c. development.

3. 5. 6. Beside the preceding polemic, political sphere the prefix is used in chemico-medical terms with the meaning 'counteractive, neutralizing, preventive of . . .'. We have many adjectives which may also be used as primaries with meaning 'agent, remedy', formed on the pattern anti-catarrhal (i.e. a type parallel to the type *anti-Platonic*). The type goes back to the 17th c. From the second half of the 17th c. on we find examples such as *antifebrile* 1661, *anti-hypnotics* 1681, *anti-hysteric, anti-catarrhal, anti-sudorific, antipleuretic, anti-pyretic, anti-convulsive, anti-hydropic,* joc. *anti-fogmatic* 'hard liquor' US (all 18th c.), *anti-bacterial, anti-corrosive, anti-diphtheritic, antineuritic, anti-pestilential, antirachitic.*

3. 5. 7. A semantic variant of the type *anti-court (party)* is the 19th c. development antiaircraft (battery) which has become especially productive in recent years. The meaning of such cbs is ('agent, device, product etc.) used against, destroying, preventing . . .'. Examples are *antifade, antiflash, antifreeze, antigas, antiglare, antiknock, antirust, antitheft, antiwrinkle*. Some are (also) primaries, as *antifreeze, antifriction, antiknock, antimacassar, antitoxin.*

3. 5. 8.   On a NL basis of coining we have various scientific sbs and adjs in which *anti-* has the shade of locative or adversative oppositeness, as *anti-clastic, anticlimax, antisolar, anticyclone, antipetalous, antihemisphere.*

Scientific words were originally coined on an OGr basis of coining, which means that *anti* becomes *ant-* before a vowel or *h*, as in *antacid, antalgic, antemetic, antepilectic, anthelmintic* etc. But there is now a stronger tendency to form words on a native basis, so *anti-* tends to be preserved throughout. The result are words like *anti-acid, anti-aphrodisiac, anti-apoplectic, anti-arthritic, anti-asthmatic, anti-emetic, anti-icteric, anti-hysteric.*

3. 5. 9.   The particle bears the main stress in cbs where it has attributive character, i.e. in the type *antichrist*; in cbs based on a prepositional relation the heavy stress is on the root while the particle bears a middle stress only. *Antiserum* (stressed on the root) is formed after *antitoxin.*

3. 6. 1.   arch- /a(r)tš/

Through Christian Greek, *archi-* became a prefix with ecclesiastical words and passed into Ecclesiastical Latin. From there it entered the languages of christianized nations. This is why in Old English we have words like *arcediacon, arcebisceop, arcestōl.*

The meaning of *arch-* is 'chief, principal, high'. The particle is prefixed to sbs denoting the holder of an office, either ecclesiastical or profane, or to general personal sbs, today only in a depreciative sense, conveying the shade of odium. Continuing the line of OE we have *arch-dean* 1425—1646, *arch-flamen* 1425, *archpriest* 1485, *arch-presbyter* 1562, *arch-prelate* 1594, *arch-patriarch* 1579, *arch-primate* 1583, *arch-chaplain* 1614.

With profane words we find it in connection with titles of the Holy Roman Empire, as *arch-marshal* 1634, *arch-steward* 1643, *arch-chamberlain* 1693 or with translated foreign titles and their derivatives, as *archduke* 1530, *archduchess* 1618, *archducal, archduchy* 1680. Its use with other positions is archaic or obsolete now, as *arch-governor* 1567, *arch-chief* (= Christ) 1590, *arch-player* 1610, *arch-architect* 1640, *arch-shepherd* (= Christ) 1656, *arch-gunner* 1664, *arch-philarch* 1683, *arch-eunuch* 18th c., *arch-apostle* 1726, *arch-jockey* 1761, *arch-druid* 1839.

In a few words *arch-* means 'first in time, original': the *arch-founder of Prelaty, S. Peter* 1641, *arch-god* 1846, *arch-messenger* 1835, the non-personal *arch-christendom* 1630 (= G ur-).

With the meaning 'chief, greatest, leading' it has formed a few non-personal sbs, now obsolete, as *arch-sin* 1598, *arch-beacon* 1603, *arch-city* 1633, *arch-fire* 1654, *arch-heart* 1685, *arch-piece* 1630.

3. 6. 2.   As early as the beginning of the 16th c. the prefix is frequently attached to personal sbs or names implying odium, thus intensifying the pejorative nuance. In the 16th and 17th c. it was chiefly used with words for the devil, Judas Iscariot, for heretics or other persons religiously or morally offensive, and has kept its character of detraction ever since. The earliest example seems to be *arch-pirate* 1489 which renders L *archipirata* (= OGr *archi-peirātēs*). After this were coined *arch-traitor* 1539, *arch-enemy* 1550,

arch-foe 1615, *arch-fiend* 1667, *arch-politician* (= Satan) 1665 / *arch-heretic* 1528, (*that Romish*) *arch-baalam* 1579, *arch-rebel* 1583, *arch-cosener* 1594, *arch-villain* 1603, *arch-defender* (*of drunkenness*) 1616, *arch-exorcist* 1612, *arch-devil* 1649, *arch-rogue* 1650, *arch-turncoat* 1654, *arch-hypocrite* 1685, *arch-Semipelagian* 1674, *arch-plagiary* (= Adam) 1659, *arch-wench* (= Venus) 1656, *arch-pretenders* (*to sanctity*) 1677, *arch-bouteferu* 1685, *arch-murderer* 1711. 19th c. are *arch-cheater, arch-deceiver, arch-depredator, arch-disturber, archhumbug, arch-knave.* In Late Modern English, *arch-* is no longer used in the neutral sense of 'chief' (at least the OED has no quotations) so the following instance is app. isolated: *Mrs. Ward is well known as the arch exponent, in England, of the roman à thèse* (The Times Lit. Spl. June 15, 1951, p. 372). *Arch* here cannot be the independent word (see below 3. 6. 3) either.

The corresponding G prefix *erz-* has had a similar development. With a few exceptions there have arisen only pejorative words since the 16th c., as *Erzbösewicht, Erzschelm, Erztrottel, erzdumm, erzfaul, erzgrob* etc.

English has never formed adjs with *arch-* (in contradistinction to French and German; F *archiconnu, archiplein* etc., German coinings just mentioned). Milton formed *arch-chemic* 1667, a later nonce-word is *arch-noble* 1761.

Archangel c 1175 has prob. undergone the direct influence of L *archangelus*, as the pronunciation [a(r)k] seems to indicate.

3. 6. 3. The frequency of cbs with *arch-* helped to establish the use of *arch* as an independent word. The particle has been used as an adj from about 1550 on, first in sense 'chief, prime', with a depreciative nuance, then with the meaning 'clever, cunning, crafty'; i.e. it developed out of cbs with the profane words quoted above, when the use of *arch-* in the religious sphere had already slowly ebbed back. Today the word *arch* is chiefly applied to women and means 'pleasantly mischievous'. The first quotation for this use is from 1810 in the OED: *arch was her look, and she had pleasant ways.*

3. 7. auto- /ˈɔto, ˈɔtə/

represents OGr *auto-* 'self', a very frequent formative in OGr wf. Though Late Latin has a few loans, as *autochthones, autogenes, autographus, automatus, automaton*, it is much later, in Modern Latin, that it becomes a formative with learned words. After the pattern of Neo-Latin, English word-coining starts in the 19th c. Especially since the two last decades of the century *auto-* has become very productive as a scientific and technical prefix. The general meaning is 'in respect of the self', and its uses are somewhat parallel to *self-* in combination. *Auto-* is chiefly prefixed to sbs denoting agent, action or state, and to adjs, in relations corresponding to that of a subject, an object or a subjunct in a sentence. Exs are *auto-biography, -biographer, -erotism, -genesis, -hypnosis, -therapy, -stability, -suggestion, -infection, -inoculation* / *auto-infectant, -intoxicant, -genetic, -poisonous, -infective, -motive.*

In technical jargon, *auto-* is prefixed to names denoting apparatuses or devices with the meaning 'self-acting, self-propelling, automatic' or the like.

This use is recorded from about 1885. Exs are *auto-accumulator, -coherer, -converter, -detector, -transformer*; *autoharp, autopiano*.

Clipping-cpds are cbs such as *autocar, autotruck, automotor, autobus*, where *auto-* is short for *automobile* (which is itself a loan from French).

3. 8. 1. be- /bɪ/

is historically the unstressed form of the particle *by*. The primitive meaning is therefore 'by, around, about, near' etc. which underlies composite particles as *before, behind, beside, beneath, beyond, between, benorth, besouth* and other prepositional cbs as *behalf, behest, behoof*. But this type was rare so far back as OE. *Because* is not recorded before c 1305.

3. 8. 2.

With vbs, *be-* has since OE played the role of an inseparable prefix, in different shades of meaning. The locative sense 'about, around' appears in OE *bedelfan* 'bedelve', *belicgan* 'belie, lie near', *berinnan* 'run or flow round', *begyrdan* 'begird', *bewalwian* 'bewallow', *besawan* 'besow', *becnyttan* 'beknit', *bewyrcan* 'bework, embroider' (—1637). In later formations like *beclothe* 1509, *bedeck* 1566, *bescatter* 1574, *bestrew* 1667, *be-*, meaning 'about', is rather an intensifier of the verbal idea.

In some cases the prf does not seem to add or to have added any nuance to the verb, as in *betrap* 'catch in a trap' OE, *betoken* 'token, signify', obs. *bemean* 'signify' (1300—1502), obs. *betrust* 'trust' (1440—1748), *befriend* 1559; in others the prefixed verbs came to lose connection with the respective unprefixed verbs, either in content, or in form, or in both, as *become, begin, behold, beget, befall*, obs. *bename* 'declare solemnly' (all OE), *behave* (fr. *have*) 1440, *becall* 'challenge' (ME) or 'call names' (1683), *befit* 1460. The unprefixed counterparts have died out of *begin* OE, *bequeath* OE, *believe* 1200, *betray* 1275. *Friend* is arch. now. *Betroth* (ME *bitreuðien*) is a parasynthetic derivative from *treuðe* 'truth' (later assimilated to the byform *trouthe*), the simple vb *troth* (now obs.) is later.

3. 8. 3.

Phrases of the type 'bemoan a man' may orig. have been analysed as 'moan about a man', i.e. as a vb plus its prepositional object: *beshine* 'shine on', *beclip* 'embrace' (obs.), *beride* 'ride beside or over', obs. *betell* 'tell (things) about' OE—1567. But the result was that *be-* came to make an intransitive vb transitive, i.e. in the above phrase 'a man' became the direct object of the verb 'bemoan'. To this day *be-* has chiefly formed transitive vbs. A few examples are *bedip*, obs. *begripe, belie, beweep, begnaw, besmear* OE, obs. *beclap, bewrap, besprinkle, becharm, besiege, bewail* (ME), *bedaub* 1533, *bepaint* 1555, *bedash* 1564, *belabor* 1596, *bemock* 1607, *bestick* 1623. For the sake of classification, other vbs are listed in various groups below.

3. 8. 4.

In connection with verbs such as *smear, weep, wail*, the prf is easily understood as an intensifying element. It is also possible that the sense development was from 'around' to 'all around' to 'all over, throroughly, completely' which *be-* had acquired by the ME period. This sense underlies b e s m e a r OE, *bewail* 'wail loudly', *bebleed* 'cover with blood', *beblot* 'blot all over', *beslobber, beslubber, besoil* ME, *berate* 'rate vehemently, scold' 1548, *bestir* 1549, *bedeck*

1566, *bespout* 1575, *beslaver* 1589, *bedazzle* 1596, *belam* 'lam, thrash thoroughly' 1595, *bebless* 1598 'bless profusely', *bewilder* 1684 'wilder (arch.) completely'. Others are *bestick, bestrew, bescratch, bescrawl, bescribble, besplash, bespot, bespeckle, besputter, bespatter, besmirch,* the obs. vbs *bespurt, bespurtle, besquirt, bespawl.* Words of the 'besmear' type represent the majority of the group.

3. 8. 5.   When intensity is overstressed, there is but a step to the meaning 'overdoing the action', esp. if the vb itself favors the development, as in *bedrabble* 1440, *bepaint* 'paint obtrusively' 1555, *beblister* 1575, *bedabble* 1590, *beclaw* 1603 (cf. G *verkratzen*), *bedizen* 'dress out with vulgar finery' 1661.

According to the meaning of the unprefixed vb, the overdoing of an action may turn into the opposite of what is originally meant by the prefix, i.e. into destruction. Obs. *behack* (a sword, a blade) is the equivalent of G *zerhacken*. Here belongs the so-called privative meaning of the prefix, which is, however, only an aspect of intensifying *be-* with vbs that are privative in themselves. Verbs of this category are *bereave,* the obs. vbs *bedeal, benim,* and OE vbs like *bescieran* 'shear', *benēotan* 'bereave, deprive', *beceorfan* 'carve'. In ME were coined *bebar* 'bar, debar' (a 1230—1649) and *bestow* 'stow away' (1393 arch.). This group is joined by vbs with a substantival basis such as *behead* and the obs. vbs *belimb, beland,* meaning 'deprive of . . .'. In German there are many more vbs of this type (see Wi 108. 2).

3. 8. 6.   The usual meaning of denominal vbs containing the prf is, however, ornative, either in the sense 'make (into) . . .' or 'furnish, cover etc. with . . .'. The first meaning is found with adjs as well as sbs. On a deadjectival basis were coined *befast* (OE *befæstan*), *befoul* (ME *befulian*). But the type grows common in the second half of the 16th c. only. The vbs are primarily intensifying as compared with their unprefixed counterparts, but the predominant nuance is that of conspicuousness, obtrusiveness, though not with all words. Examples are *becalm* 1559, *bedim* 1566, *besot* 1581, *bemad* 1605, *besaint* 1609, *belate* 1642, *bemean* 1651, *belittle* 1796.

3. 8. 7.   Derived from sbs with the underlying notion of quality, title, or the like are b e f o o l, *beshrew* 'make wicked' ME, *bemonster* 'make monstrous' 1605, *beslave* 'make into a slave' 1615, with a tinge of ridicule in words like *bespouse, beknight, bebaron, bedoctor, bebishop, beclown.*

The sense is often 'call (a p.) . . .', as in *begrace* 1530, *beknave* 1525, *belord* 1586, obs. *bewhore* (1604—1623), *bemadam* 1614 a.o., which may be mere mock titles. Today this is the only nuance such coinages have.

3. 8. 8.   From sbs that do not denote a quality or title are derived vbs with the meaning 'affect, provide, cover, surround with . . .'. The root words are chiefly concrete sbs. The type grows common in the 16th c., though we have coinages from OE on. Examples are b e w a l l, *besnow* OE, *becharm, beclog, bedew, bedrop, beguile, besmoke, bewitch* ME, *begore* (1500—1683), *belime* (1555—1674), *bemire* 1532, *begrime* 1533, *bejewel* 1557, *bestain* 1559, *beblood* 1580, *becrown* 1583, *begift* 1590 H, *becloud* 1598, *bemist* 1598, *benet* 1602, *besmut* 1610, *bestar* 1612, *becurl* 1614, *befringe* 1611, *belace* 1648, *belute* 1740, *begem* 1800, *besmutch* 1831, *begirdle* 1837, *befur* 1859.

7*

The idea of overloadedness is inherent in all the preceding words, and a tinge of mockery or disparagement may, but need not, accompany them. With participial adjs the shade implied is always that of depreciation or ridicule, the serious and normal counterparts of such coinings being words without the prf. Words like *bebelted, beflogged, befathered, beribboned, berouged, bepowdered, beturbaned* (see OED s.v. be- 7) are instances of this usage.

It is only with the shade of overloadedness, disparagement, or ridicule that *be-* is a productive morpheme in PE.

3. 8. 9.   Like other Germanic languages (see Wi 103), English has used *be-* chiefly for the formation of transitive verbs. In intransitive use are or were *bechance* 1527, *belove* 'to be pleasing' (ME only), *bemoan* OE, *besteal* 'move stealthily' (OE-1597), *befall* OE, *belong** ME, *betime* 'happen' (ME only), *beweep* (ME only). In reflexive use are or were *behave, betake, besteal, bewend* 'turn away' (OE-ME), *bewield* 'use one's limbs' (ME-1577).

3. 9. 1.   bi- /baɪ/

is a Modern English prf, chiefly found with biological words, almost all of them parasynthetic adjs. They belong to the international scientific vocabulary and are coined on a Neo-Latin basis, partly also on the native type of extended bahuvrihi-cpds. The types are: **biangular, biangulate** (both Latin types), **biangulated** (the preceding type plus -*ed*), **biforked** (i.e. type *fivefingered*). The principal meaning of all is 'having two ...'. Examples are *biauricular, biauriculate, biaxial, bicapsular, bicephalous, bicorporal, bicuspidate, bifacial, bifilar, bifocal, bilobate, bipetalous, bipolar, bisexual, bisulcate / bipectinated, bipinnated / bicolored, bifanged, biforked, bilobed, bimotored, bivalved, bivaulted.*

3. 9. 2.   As possessive adjs can be apprehended as ptcs, the above meaning comes to be 'being ... double, twice'. *Bipinnate* may be analysed as 'having two pinnae' or 'being doubly pinnate'. This gave rise to the type **biconcave** which does not appear to exist in Classical Latin. So *bi-* is prefixed to adjs applied to things which exist in pairs or have two sides. The implication then is 'doubly ...' or '... on both sides', as with the type word *biconcave*, analysable as 'doubly concave' or 'concave on both sides'. Other instances are *biconvex, bilabial, bimanual, bicurvate, bipyramidal, birectangular, bicrescentic, biflex.*

3. 9. 3.   In terms of chemistry *bi-* denotes "the presence of two atoms or equivalents of the constituent to the name of which it is prefixed, or the presence of this constituent in double the ordinary proportion, as in *bicarbonate, bisulphate. Bi-* and *di-* are sometimes interchangeable, but *di-* is now usually preferred. In organic chemistry *bi-* is used esp. to denote the doubling of a radical or molecule, as in *biphenyl*" (Webster's Collegiate Dictionary s.v. *bi-*). These words are coined as parasynthetic formations, parallel to the types listed above (e.g. *bi-chrom-ate*). A few examples: *bicarbonate, bichloride, bichromate, biphenyl, bisulphate.*

In anatomy *bi-* indicates relation to each of two symmetrically paired parts, as in *bialveolar, bi-iliac, bi-mastoid, biparietal, bilateral.*

3. 9. 4. Early coinages are *bicorporated* 1572, obs. *bicapited* 1572, *biforked* 1578, *bicapsular* 1679, *bicipitous* 1646, *bipennate* 1713, *bilobed* 1756, *bimaculate(d)* 1769. The majority of such words are, however, 19th c.

In general learned usage are words such as *bicameral* 'having two legislative chambers', *bilateral* (law), *bilingual*, *binational*—all 19th c. terms.

Bahuvrihi-sbs are rare: *bipod* (after *tripod*), *bi-prong* (after *bident* = L *bidens*), *bi-valves* 'two-winged door', *bivalve* 'animal with a two-valved shell'. The only common word is *bi-plane* 1908.

In EMoE the prf was used without any pronounced significance, as in *bifold* 1609, *bicleft* 1627 (prob. after *bipartite* 1506 = L *bipartitus*). Isolated also are *bi-millionaire*, *bi-nomenclature* where *bi-* means 'double'.

3. 9. 5. After *biennial* 1621 (rendering L *biennalis*) 'belonging to a biennium, lasting two years, occurring every two years' were coined *bimestrial* 1846 (the Latin is *bimestris*) 'lasting two months', *bimensal*, *bicentennial*, even words with a native basis, as *bimonthly*, *biweekly*. The last two, also used as sbs, chiefly refer to or denote periodicals that appear every two . . . On the other hand, the hybrids *biannual*, *biquarterly*, *biyearly*, *bi-weekly* mean 'occuring twice a . . .'. Because of their ambiguity, they are often replaced by *semi*-cbs. This usage is 19th c. Cp. Word-Study 31. 4. p. 6, 1956.

3. 10.   circum- /'sɜ(r)kəm/

forms words on a Latin basis, verbs (and their denominal derivatives) and adjectives. The respective Latin types are c i r c u m a m b u l a r e and c i r c u m-m u r a n u s. Coinages of the first group are vbs of the 'move' class with meaning '. . . around'. English usage continues a Latin tradition rather than adding a new element. Many of the words are merely anglicized Latin, others are Latin virtually; i.e. a Latin original does not seem to be recorded (which does not mean much, as a complete dictionary of the entire Latinity is so far wanting). The type comes into use towards the close of the 15th c., is strongest in the 17th c. when it is used also for wfnb, and slowly ebbs back in the 18th c. The 19th c. has only occasional coinings. Examples are *circumambulate, circumaviate, circumnavigate, circumfuse, circumvallate / circumambulation, circumgyration, circumnavigation, circumvallation, circumrotation, circumvention / circumfluent, circumambient, circumjacent, circumadjacent / circumnavigator / circumnavigable.*

Examples of cbs formed on a native basis, all nonce-words, most of them from the 17th c. are *circum-bind, -flow, -glaze, -roll, -stand, -walk, -crossed, -beamed, -flanked, -bendingly.*

Words of the type *circummuranus* 'situated around the wall' were infrequent in Latin. Neo-Latin found the type useful for scientific terminology, and in English we find it from the 19th c. onwards (*circumcentral* is rec. from 1708). The adjs belong to anatomy, astronomy, and geography, the meaning expressed is 'situated around . . .', in astronomy also 'revolving about . . .'. Examples are *circum-anal, -basal, -columnar, -lental, -ocular, -oesophagal, -oral, -orbital, -renal, -umbilical / circum-arctic, -antarctic, -meridian, -axial, -zenithal, -spheral, -mundane, -solar, -Jovial, -lunar.*

3. 11.   cis- /sɪs/

has formed several parasynthetic adjs on a Latin basis of coining with the meaning 'found, situated this side of . . .'. *Cis* is the Latin opposite of *trans* and has found its way into English through loans like *cisalpine* 1542, *cismontane* 1792. The 19th c. formed a few scholarly words such as *cis-andine*, *cis-equatorial*, *cis-Elysial*, *cis-leithan* (fr. river Leitha), *cis-lunar*, *cis-oceanic*, *cis-pontine*. Older is *cis-marine* 1713. *Cis-atlantic* 1823 is about the only common word of the group.

The words *cis-Elizabethan* 1870 and *cis-reformation* (time) 1662 transfer the notion of place into that of time. The meaning here is 'belonging to the time after . . ., subsequent to . . .'.

3. 12. 1.   co- /ko/

conveys the meaning 'together, joint, jointly' in words that are either scientific or learned or have an official, formal character. Coinages are chiefly nominal, but the prf is found with vbs also. The ultimate patterns are Latin, but the basis of coining is native. The Latin types are c o h e r e s 'co-heir' (a type still weak in CL but becoming exceedingly strong in LL and ML), c o o p e r a r i 'co-operate', c o - a e v u s 'of the same age'. English is app. indebted to French as well as to Latin for the growth of the first type: *co-executor* ME, *co-feoffee* 1458, *co-parcener* 1503 are loans from French. But it would otherwise be futile to be looking for one or the other influence in a word as the pattern is both Latin and French. The meaning of prefixed personal sbs is 'joint or fellow . . .', as *coheir* 1532, obs. *co-inheritor* 1526, *co-burgess* 1565, *co-ambassador* 1579, *co-brother* 1589, *co-defendant* 1640, *co-assessor* 1644, *co-guardian* 1643, *co-rival* 1678, *co-juror* 1735, *co-bishop* 1726, *co-regent* 1799, *co-ally* 1828, *co-signatory* 1865. Many of the preceding words belong to legal phraseology, as do also *co-assignee*, *co-auditor*, *co-creditor*, *co-debtor*, *co-legatee*, *co-tenant*, *co-trustee*, *co-respondent*, *co-obligant*. With this, English has only continued the line of Latin and Old French. Formations outside this sphere have recently become more and more frequent, as *co-author*, *co-hostess*, *co-producer*, *co-religionary*, *co-star*, *co-chairman*, *co-captain*, *co-player*, *co-pilot*.

Non-personal sbs are rarer: *co-parcenery* 1503, *co-eternity* 1587, *co-portion* 1596, *co-agency* 1611, *co-existence* 1646, *co-estate* 1756, *co-effect* 1768, *co-establishment* 1791, *co-presence* 1817, *co-relation* 1839, all meaning "joint . . ." *Peaceful coexistence* is a much used phrase in recent political jargon.

3. 12. 2.

The verbal type c o - e x i s t is comparatively weak. The meaning of the vbs is ". . . together jointly or mutually", as in *co-unite* 1548, *co-articulate* 1578, *co-work* 1613, *co-extend* 1617, *co-appear* 1635, *co-adventure* 1642, *co-attest* 1650, *co-ordain* 1651, *co-exist* 1677, *co-inhere* 1836, *co-adjust* 1864. Others are *co-assist*, *co-assume*, *co-join*, *co-organize*, *co-order* 'arrange co-ordinately', *co-ossify*.

Deverbal derivatives are *co-optation* 1533, *co-indication* 1623, *co-adaptation* 1803, *co-education* 1874.

Ptcs are coined on a Latin basis, as *co-adjuvant* 1625, *co-efficient* 1665, *co-adjutant* 1708, *co-sentient* 1801, *co-adjacent* 1842.

Classical Latin had no adjs with *co-*. Adjs are found with growing frequency from LL on, as *co-aeternus, co-aequalis, co-aetaneus, co-aevus*. Most of the English coinages are parasynthetic adjs (many of them mathem. terms) on a Latin basis with the meaning 'of the same . . .', as *co-eternal* ME, *co-equal* 1460, *co-essential* 1471, *co-eval* 1605, *coetaneous* 1608, *co-instantaneous* 1768, *co-tidal* 1833, *co-polar* 1852, *co-planar* 1862, *co-seismal* 1851, *co-axial* 1881, *co-axal* 1879, *co-radicate* 1882, *co-centric, co-numerary*.

Non-parasynthetic are obs. *co-supreme* 1599—1619, *co-infinite* 1654, *co-extensive* 1771, *co-intense* 1855, *co-subordinate*, all with meaning 'in the same way or jointly . . .'.

In astronomic and mathematical terms, *co-* is often short for *complement*. For such cbs see the chapter 'Clipping' under 'clipping-cpds'.

3.13.1. counter- /ˈkaʊntə(r)/

came into English through ME loans of OF *contre-, countre-* words. In OF the prf was both nominal and verbal, as it is still in PF. Such loans are the sb *counterpoise*, the adj *counterfeit*, the vbs *countermand, countervail, counterplead* a.o. But as a living formative *counter-* is more recent. It became productive in the second half of the 16th c., after and alongside of a set of military terms which were borrowed from French, as *counter-gard* 1523, *counter-mure* 1524, *counter-mine* 1548, *counter-fort* 1590, *counter-battery* 1592, *counter-force* 1609. Outside this domain are *counter-poison* 1578 and the obs. *counter-feisance* 1590.

3.13.2. English coinages are c o u n t e r p l e a 1565, *counter-blast* 1567, *counter-check* 1559, *counterbond* 1594, *counterstroke* 1596, *counterwork* 1598, *counter-charm* 1600, *counterplot* 1611, *countercharge* 1611, *counterpressure* 1651, *counter-blow* 1655/60, *counterevidence* 1665, *counterweight* 1693, *counterdeed* 1727, *counterspell* 1725, *counterstep* 1720, *counterattraction* 1763, *counterrevolution* 1793, *counterinfluence* 1834, *counterwall* 1836, *counterreformation* 1840, *counterirritant* 1854, *countermove* 1858, *counterclaim* 1876. These cbs are based on the relation 'adjunct/primary', their meaning is '. . . done in replication, as a rejoinder, in reciprocation of or return for a . . .'. This sense has, from the beginning, been the chief one. Derivatives are possible ad libitum: *counterdemonstration, -declaration, -statement, -attack, -espionnage, -propaganda, -threat, -suit, -assurance, -engagement, -obligation, -offer* etc. etc.

We have the variant '. . . coming counter' in a few sea terms, as *counterflow, counterstream, counterwave, counterwind, countertide*, obs. *countersea*. The group is as old as the foregoing one.

3.13.3. *Counter-* in the locative sense 'opposite and parallel' is likewise OF. In English it is frequent with terms of heraldry, for which I refer the reader to OED (*counter-* 14); but it occurs also with words of a more general character, as *counterpoise* 'weight on the opposite side' ME (= OF *countrepeis*), *counterbalance* in obs. sense 'opposite scale of a balance' 1580, *counterpart* 1617, *counteropening* 1611, *counterscale* 1645, *counterfissure* 1656, obs. *counterbill* 'counterpart of a bill' 1598, obs. *counterbook* 1622, *counterfoil* 1706, obs. *counterstock* 1706, *counterarch* 1726, *counterslope* 1836, *counterpole* 1839, *counterearth* 1857, *counterhem* 1882.

3. 13. 4. From the sense 'opposite and parallel' the additional implication 'parallel, second (i.e. not principal, original)' may arise, as found in *countercopy, countermark, countercipher, counterseal, countertype, counterdike, counterdrain,* obs. *counter-admiral* (F) 'rear-admiral', technical terms all of them. General words with this shade of meaning do not occur.

3. 13. 5. With personal sbs the prf is rather unusual. Words like *counter-apostle, -christ, -Jesus, -prophet, -Kaiser* are rare. Word coining on the basis of a prepositional relation has likewise been unsuccessful (on account of *anti-*), and words such as *counternatural, counterpest* have remained isolated. Common is, however, *counterclockwise* 1888.

3. 13. 6. ME borrowed a number of vbs from OF, as *countermand, countervail, counterwait, counterplead, counterpoise, countersign.* The only ME coinage is *counterweigh* (after *counterpoise*). Otherwise there are no English verbal coinages before the second half of the 16th c., and these are chiefly converted sbs (*counterfeit* ME is a converted adj), as *countermine* 1580, *counterplot* 1597, *counterwork* 1602, *counterbalance* 1603, *countermarch* 1625, *counterbrace, counterclaim, counterinfluence.* Not converted are *countersecure* 1667, *counteract* 1678, *counterhit, counterstrike.* The chief reason why *counter-* did not become a verbal prf is probably that it had early developed into an independent word. In adverbial use it is already ME (as a vb it followed somewhat later), so the position before the vb had limited possibilities.

3. 13. 7. The prf has the main stress in sbs coined on an adjunct/primary basis. The root has a middle stress. Verbs and verbal derivatives (*counteractant, counteractive*) have the main stress on the root while the prf has a middle stress.

3. 14. crypto- /'krɪpto/

means 'hidden, secret' and is prefixed to learned words of general currency as well as to scientific terms. The origin is OGr *kryptós* 'hidden, concealed', as used in NL (the corresponding OGr formative was *krypso-* or *krypsi-*) *crypto-porticus* 'concealed portico', *cryptographia, cryptologia, cryptogamia.* The first *crypto-* cbs occur in the 17th c., but they are nothing more than adapted Latin words, such as *cryptology* 1645, *cryptography* 1658, *cryptographal* 1691. Since about 1735, more extensively after 1850, *crypto-* has been made use of in the terminology of natural history. Cbs are formed on a NL basis, i.e. *crypto-* cannot, on principle, be considered as a prf added to an independent English word. Before a vowel, it is reduced to *crypt-* (*cryptodont, crypt-opine* etc.). It chiefly forms parasynthetic adjs of the type crypto-branchiate 'having the gills concealed'. Examples are *crypto-carpous, -carpic, -cephalous, -crystalline, -neurous* etc.

The type crypto-Calvinist 'hidden Calvinist' is, so to speak, the counterpart of the type *pseudo-Calvinist.* A crypto-Calvinist is one who is a Calvinist but does not say so; a pseudo-Calvinist is a person who pretends to be a Calvinist but, in reality, is not. The type-word is the first of the group to occur in English (about 1760, while the corresponding terms were used in the 16th c. in France

and Germany to denote secret sympathizers with the Calvinists). The type
has kept its tinge of secret adherence to a tenet or ideology ever since. Examples
are *crypto-Catholic, -Christian, -heretic, -Jesuit, -Communist, -Royalist* etc.,
derivatives in *-ism,* and occasional other coinings such as *crypto-splenetic.* Most
of the cbs have been coined since 1850.

3.15.1. de- /di/

As for the origin of *de-* as a derivative morpheme, OED (s.v. *de-* I.) explains
it by "the free adoption" of French verbs, but of the verbs it quotes in support
(*débarasser, débrutaliser, décentraliser, déconstiper, débanquer, débonder, dé-
chaperonner, défroquer*) only *débrutaliser, décentraliser,* and *défroquer* were
actually introduced into English while *débarasser* and *débonder* could not have
been analysed as syntagmas in English. Jespersen (MEG VI. 26.55) derives
the prefix "from Lat. *de-* (or exceptionally from F *des-* Lat. *dis-,* as in *defy*)",
but we do not understand how from *defy, declare, denote, depend, designate* a
derivative pattern could have sprung. In a similar way, Koziol (§§ 324—325)
does not attempt to explain how loans such as *debar, decease, decay, decadence*
could be analysed and lead to new formations in English. The question, how-
ever, is important, as it concerns the rise of a grammatical pattern in a lan-
guage.

3.15.2. There are two derivational patterns in English: d e-m i l i t a r i z e and
de-l o u s e, both basically meaning 'remove (what is denoted by the nominal
basis) from'. The bulk of the first group is represented by parasynthetic
verbs in *-ize,* analysable either on a denominal basis as privative verbs or on
a deverbal basis, thus expressing the reversal of what is indicated in the un-
prefixed verb, i.e. 'undo the action of militarizing'. Verbs in *-ate* and *-ify,* both
chiefly in scientific use, are less numerous. With the exception of verbs in
-ate, both groups originated under the influence of loans from the French.

3.15.3. In French, *dé-* has at all times formed denominal verbs with a
privative (*panne ∼ dépanner*) and deverbal verbs with a reversative meaning
(*faire ∼ défaire*). Toward the end of the 18th c., when verbs in *-iser* become
favorites, because they had a scientific ring, *de-* verbs joined this group (*dé-
moraliser, dénationaliser* were vogue words of the French Revolution). They
found their way into English, where the pattern became very productive
simultaneously with the rise and growth of the pattern in French. The almost
instantaneous independence of the prefix *de-* in English is proved by the fact
that French words like *désoxygéner, désoxyder* and others appear as *deoxidize*
1794, *deoxygenate* 1799. English adopted the derivational pattern, not words.
The verbs *decardinalize* and *decanonize* are recorded 1624, but they are nonce
words. The adoption of the pattern starts with such words as *demoralize* 1793,
decatholicize 1794, *deoxidize* 1794, *denaturalize* 1800, *denationalize* 1807, *de-
polarize* 1815, *dehumanize* 1818, *debarbarize* 1823, *decarbonize* 1825. Later
recorded are *deanimalize* 1865, *deanthropomorphize* 1874, *decentralize* 1851,
dechristianize 1834, *decivilize* 1859, *deethicize* 1887, *defunctionalize* 1877, *de-
localize* 1855, *demagnetize* 1843, *dematerialize* 1884, *demilitarize* 1883, *demission-
ize* 1883, *demobilize* 1866, *deodorize* 1849, *depersonalize* 1866, *desexualize* 1894,

despiritualize 1868, *desulphurize* 1854, *devocalize* 1877. Our century has coined such words as *defeminize* 1900, *dehaematize* 1903, *desensitize* 1904, *detribalize* 1920, *deurbanize* 1924, *devalorize* (money) 1925, *devirilize* 1901, *de-Stalinize* 1956, *denuclearize* 1957.

The pattern is weak with verbs in *-ify*. We may quote such verbs as *decalcify, deossify, devitrify, degasify, deelectrify*, and *denazify*, a verb much used after World War II, more common in its derivative *denazification*.

Derivatives from verbs in *-ate* are more numerous. The pattern is found in Classical Latin, where we have denominal verbs like *dearmare, decorticare, defaecare, deflorare, depilare, detruncare, decolorare, deglutinare, defoliare* (ML) all meaning 'deprive of (what is denoted by the noun)'. Early adaptations of the preceding verbs are *depopulate* (in Medieval Latin *depopulare* had the meaning 'depopulate') 1545, *depilate* 1560, *defecate* 1575, *decorticate* 1611, *detruncate* 1623, *decolorate* 1623, *deglutinate* 1609, *defoliate* 1793. The pattern led to the coining of such scientific words as *desulphurate* 1757 (through *desulphuration*), *deoxygenate* 1799, *deoxidate* 1799, *desophisticate* 1827, *defibrinate* 1845, *decaudate* 1864, *denitrate* 1863, *dehydrate* 1876, *decerebrate* 1901, *decapsulate* (surgery term) 1907.

3. 15. 4.   As to the character of the verbs of the three preceding groups, *-ize* verbs are predominantly learned, many of them being scientific. Verbs in *-ify* (with the exception of *denazify, denazification*) are essentially scientific, as are also verbs in *-ate*. Most verbs are denominal, analysable as 'deprive of, rid of, rid of the character of . . .'. At the same time, these verbs are also, often more naturally so, analysable as counterparts of unprefixed verbs and then come to mean 'reverse, undo (what is denoted by the verb)'. Some verbs admit of the latter analysis only, as *demobilize, decentralize, devalorize, decivilize*. In this way, we often have a development toward this reversative-deverbal pattern of interpretation, witnessed by such coinings as *deobstruct* 1653, *decompose* 1751 (infl. by F *décomposer*), *deconsecrate* 1867, *decompress* 1911, though perh. better analysed as a denominal verb 'relieve from compression', *deregister* 'reverse the registering' 1924, *decontaminate* 1937. The recent words *desegregate* and *desegregation*, both probably not older than the decision of the U.S. Supreme Court in 1954 about desegregated schools (the words are not found in dictionaries), are based on the same semantic pattern. The only rival in this function is *dis-* (as in *disconnect* ∼ *connect*); reversative *un-* is chiefly used with everyday words without a learned tinge (as in *undo* ∼ *do*). However, the productivity of this rival *dis-* seems to have been decreasing for some time back. Of the few words coined in the last 100 years, only the recent word *disassemble* is in common use (see *dis-*). This development would favor the development of *de-* in the pattern *segregate* ∼ *desegregate*, a course prepared by the existence of so many verbs in *-ize* analysable in the same manner.

3. 15. 5.   We now come to the pattern de-louse 'remove (what is denoted by the noun) from'. A Middle English loan such as *deplume* (representing MF *déplumer*) 1420 was probably analysable to speakers as 'deprive of plumes, feathers', and French *déchiffrer* was recognized to be based on the same semantic pattern, as it was adapted as *decipher* 1528. The type was imitated, at least tentatively. *Depasture* 1586 is early recorded with the meaning 'deprive of

pasture'. *Depasture* 'pasture' may simply represent Latin *depascere*. *Dethrone* 1609 also follows the privative denominal pattern, even though it may in the main be F *détrôner*. There are other tentative coinages such as *dehusk* 'deprive of husks' 1566 (marked obsolete in OED, but listed in Webster), *detomb* 1607, *detruth* 1647, *demast* 1666, *depark* 1700, *delawn* 'deprive (a bishop) of his lawn, i.e. his office' 1726, *debark* 'strip of its bark' 1744, *defoliage* 1831, *deflesh* 1837. With the exception of *decipher*, *dethrone*, however, none of the preceding words has gained currency.

3. 15. 6.   For the last hundred years, there have again been quite a number of coinages, and in recent years the derivative pattern has become firmly established, though many words are purely technical..The pattern probably would not have prevailed on the merits of the above mentioned verbs, as we have seen that those were never common property of the language. It was certainly the growth of the type *de-militarize* expressing the same concept 'remove the (what is denoted by the noun)', that helped promote the type *de-louse*. It is worth noting that early coinages after this pattern are all matched by Latinizing verbs in *-ize*, partly *-ate*. Cf. *decolor* 1832, *decolorize* 1836, *decolorate* 1846; *desilver* 1864, *desilverize* 1872; *desulphur* 1874, *desulphurate* 1757, *desulphurize* 1864. The non-suffixal type of derivation grows, especially with verbs denoting technical processes. It is illustrated by coinages like *depolish* 1873, *denature* 'alter the nature of (coffee, tea, alcohol)' 1878, *deglycerin* 1885, *degum* 'free (silk) from sericin' 1887, *dehorn* (cattle esp. by destroying the ends of the horns with caustic potash) 1888, *dehair* 'remove hair or wool from hides or skins' 1909, *delint* 'remove lint from' 1902, *detin* 1909, *defat*, *dewater* 1923. Webster lists *debark, degerm, degrease, dehull, dehusk, degas, derat, dewax*. While these are technical jargon, others have wider currency, as *decode* (after *decipher*) 1896, *defrost* 1895, *deice* rec., *devalue* 1918, *decontrol* 1919 (especially said of the removal of government control), *delouse* 1919, *deflea* rec., *debunk* 1927, *debeef* 'reduce the weight of a p.' rec. AE. That the pattern is alive, is proved by such possibilities as *detassel* (Webster), *dehandle* OED 1893, *deball* (The Reader's Digest 1944, 10. 98), *debulk* (MeAL⁴, 194 and Spl. 394—399). With other words it is difficult to tell what their status is, as *derate* 'diminish the burden of rates, i.e. local taxes' BE 1928, *deskill* 'deprive of skilled labor' 1941, *destool* (obviously a nonce word, meaning 'deprive (an African chief) of his 'stool', and coined after *dethrone*), *deforest* 'strip of forests' 1880. *Declutch* 'disengage a clutch' 1905 is listed in OED and Webster, but the verb is not recognized, at least not in American English (*release the clutch* is the common expression).

3. 15. 7.   Derivatives from substantives denoting vehicles have the meaning '(cause to) descend from, leave . . .', as *decart* 1860, *detrain* 1881, *debus* 1915, *deplane* 1923, *detruck* c. 1940 (of which we find satirical American English imitations like *deomnibus, dehack, dehorsecar, decanalboat* quoted by Mencken in AL⁴, Spl. I. 399).

3. 15. 8.   *Un-, de-,* and *dis-* all form verbs expressing negative ideas and are therefore rivals. Their respective derivative relevancy may be defined partly in terms of the formal and semantic patterns in which they are used, partly in

terms of their range of usage. We will consider the three concepts of negativity, reversativity, and privativity and see what the distribution of the types is.

Negativity

In this sense group, dis-agree is the only existing type. There are no rival formations with either *un-* or *de-*.

Reversativity

Dis- as in dis-join combines with verbs of Romance origin only and seems to be losing ground to the type de-segregate. This latter type, deriving verbs from Latin and Romance verbs, is more recent and has only started developing. Verbs in *-ize* and *-ify* combine with *de-*, so the relevant types are de-centralize, de-electrify. Verbs of the type dis-en-tangle are un-rivalled.

All everyday simple verbs are made reversative by means of *un-*. Therefore, un-do is the strongest type of the reversative group.

Privativity

Dis- as in dis-bar combines with Romance bases only. The prevailing concept is 'put out of, drive out of, expel from . . .'.

Un- as in un-cage enters into combinations with both native and foreign bases. The chief semantic pattern is 'release, loose from (the fetters, confinement, restraint of) . . .'.

Verbs of the type de-frost have an essentially technical connotation. They are based on the concept 'remove, extract (by some process) the . . . from'. The three preceding types, as far as the characteristic sense groups are concerned, are illustrated by the phrases *disbar a lawyer, uncage a bird, defrost an icebox.*

Parasynthetic denominal verbs in *-ize, -ify*, and *-ate* take the prefix *de-*. The relevant patterns are de-Stalinize, de-nazify, de-articulate.

3.15.9.   Baugh's (224—225) presentation of the facts concerning the negative prefixes *un-* and *dis-* (*de-* is not treated in his book) needs qualification. His remarks on the productivity of *un-* ("such life as it still enjoys", "the productive power which (*un-*) once enjoyed") and *dis-* (which Baugh maintains has greatly replaced *un-*) can hardly be upheld in the face of so much contrary evidence.

3.15.10.   *De-* has formed a few substantives with the meaning 'loss, lack, removal of . . .', as *denutrition* 1876 (a medical term, the opposite of *nutrition*), *deactivation* 'loss of radioactivity' 1904, *decompression* 1906, *decontrol* 1919, *deemphasis* (not in OED or Spl.), *demerger* rec.

3.16.   demi- /'dɛmɪ/

occurs in cbs which are either loans from French, translations of French words or technical terms in spheres whose phraseology is French, i.e. anglicized French, by tradition. The meaning of the prf is 'half'. There are only a few words which are more or less in general usage, as *demi-god* (= F *demi-dieu*) 1530, *demi-rep* (*rep* for reputable which had the sense "respectable" in the

18th c.) 1749, *demi-season* (= F *demi-saison*) 1796, *demi-bath* (= F *demi-bain*) 1847. *Demi-monde*, *demi-mondaine*, *demi-tasse* are French in form also. In *demi-semi* 1805 we have a jocularly depreciative adj made up of two prfs with the meaning 'half'. The word must be considered a cpd. *Demijohn* is F *dame-jeanne*.

The prf is occasionally in use with ordinary class nouns, often implying depreciation, as in *demi-atheist*, *-doctor*, *-gentleman*, *-Christian*, *-king*, *-lawyer*.

In spheres where the terminology is anglicized French by tradition or where French leadership is acknowledged, *demi-* forms numerous technical words. There are terms of heraldry (*demi-vol*, *demi-lion* etc. etc.), beg. with the 15th c., old names of armors, 16th c. and later (*demi-brassard*, *demi-cuirass*), of arms (*demi-cannon*, *demi-culverin*, both obs., *demi-lance*), of fortification (*demi-bastion*, *demi-gorge*, *demi-lune*), antiquated terms denoting costumes (*demi-robe*, *demi-train*, *demi-toilet* etc.), old names of weights, measures and coins, beginning about 1500 (*demi-barrel*, *demi-farthing*). Various other words have been coined (for an exhaustive treatment see OED), but except for the old-established groups, *half-* and *semi-* (the latter, for instance in music and botany), partly also *hemi-* have replaced *demi-*cbs.

3. 17.   di- /daɪ/

represents the OGr prf *di-* with the basic meaning 'two'. It forms scientific words only, chiefly terms of botany, zoology, mineralogy, coined on a Greek basis and partly adaptations of NL words. We have only adjs, coined as bahuvrihi or extended bahuvrihi cpds, as *di-dactyl* 'having two fingers' or *di-cephalous* 'having two heads'. Cbs occur from about 1700 on, but most of them date from the 19th c. A few examples are *di-arch, digastric, dipetalous, dihedral, dicoccous, dipnemonous, dipolar, diphyllous*.

The prf is used in terms of chemistry to denote the presence of two atoms, radicals, groups etc. In contradistinction to the preceding group, *di-* forms sbs as well as adjs on a native basis, all 19th c. or younger. Examples of sbs are *di-acetate, di-allyl, diamide, diamyl, dichloride, dicyanide, di-iodide, dimethyl, di-oxide, di-phenyl*.

Adjs are *di-acid* 'capable of combining with two acid radicals', *di-basic, dicalcic, dicarbon, digallic, dichromate*.

3. 18. 1.   dis- /dɪs/

The question of how prefix combinations with *dis-* originated has never been asked. It is not raised by either Jespersen (MEG VI. 26. 5), Koziol (§§ 329—334, pp. 115—116), or OED. The last (s.v. *dis-*) states that *dis-* is the Latinized form of Old French *des-* which was the popular phonetic development of Latin *dis-*, at the same time pointing out that *des-* became *de-* before a consonant during the Old French period. It does not seem to notice that the *-s* form in English then calls for an explanation. Grammarians are all agreed that gradually preconsonantal [s] became mute in the course of the eleventh, twelfth, and thirteenth centuries, early before voiced sounds (which accounts for *s-* less E *aim, blame, male, dine, isle* etc.), later before voiceless consonants

(which explains the [s] in E *mister, feast, haste, taste, beast* etc.)[1]. However, the special position of *des-* should not be overlooked: it is a morpheme and therefore liable to persevere longer than a preconsonantal [s] in one of the above monomorphemic words. We may point out, for instance, that in English the phonetic form of *-dis* in derivative syntagmas is always [dis] while in monomorphemic words the [s] becomes [z] according to the phonetic environment: *dis-armament* as against *disaster*. The Old French words and their introduction into Middle English offer a somewhat confusing picture. That [s] had become mute by and large seems to be proved by the spelling variants both in French and English; usually forms with *de-, des-, dis-* occur side by side. Of OF *des-* forms, the *s-* less form appears in English with *deface* c 1325, *defeat* c 1374 (no *des-* or *dis-* is recorded in OED), *decrease* 1382 (early practice prefers *dis-*, however), *deflower* 1382, *deform* 1400, *deplume* 1420 (in part influenced by Latin verbs, as *deformare*, ML *deplumare, deflorare*), while the *des-*form has prevailed in *dismember* 1297, *disdain* (as a sb 1290, with *de-* being the only form till about 1380 while the vb is not recorded before about 1380, with both *de-* and *dis-* equally common for some time), *discover* 1300, *discharge* 1300, *displease* 13.., *disguise* c 1325 (we have rival *de-* forms also in the 14th c.), *disfigure* 1374.

3. 18. 2.   It would thus appear that in the early loans of the 14th c. *s-* forms were still more frequent. The number of *des-* forms was greatly increased by loans of French verbs whose radical began with a vowel. To the present day, *des-* has remained the antevocalic allomorph of preconsonantal *dé-*, so the [s] never became mute in verbs such as OF *desacorder, desalouer, desavouer, desobeir*. To this group belong *dishonor* 1300, *disarm* 1374, *disallow* 1377, *disavow* 1393, *disobey* 1393, *disaccord* 1400. These phonic circumstances then seem to account for the form *des-*. The form of the prefix was subsequently changed to *dis-*. This may be due to Latinizing influence, but it may also in part be attributable to the influence of the prefix *mis-* which combined the strong OE prefix *mis-* (as in *misbelieve*) and less frequent OF *mes-* (as in *mescreant, meschief*); loans from Old French were all adjusted to the form *mis-*. The form *dis-* is definitely established by the 15th century.

3. 18. 3.   Deverbal loans are *disallow* 1377, *disavow* 1393, *disobey* 1393, *disaccord* 1400 (representing OF *desalouer, desavouer, desobeir, desacorder* respectively), all analysable as 'refuse to, fail to, not . . .'. An early English coining is *distrust*, recorded 1430 (Lydgate). However, no other examples of the use of this word occur before 1548, nor do we find any other coinage with a non-Romanic basis before the 16th century. This seems to indicate that *distrust* was probably not early in common use. Latin *diffidere* may have served as a pattern, as OED supposes. Later are recorded *disapprove* 1481, *discommend*

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[1] W. Wilmanns, op. cit. §§ 111—118. — W. Meyer-Lübke, Historische Grammatik der französischen Sprache. Teil I[2,3], § 200. Heidelberg 1913. — Kr. Nyrop, Grammaire historique de la langue française. Tome I[2], § 462. Copenhagen 1904. — M. K. Pope, From Latin to Modern French with especial consideration of Anglo-Norman, § 377. Manchester University Press 1934. — W. von Wartburg, Evolution et structure de la langue française[1], p. 126. Bern 1946. — For the whole question of the phonemic status of prefixes see 3. 1. 14—18.

1494, *disagree* 1494, *disaffirm* 1531, *disfavor* 1533, *disclaim* 1560, *dislike* 1594, *disesteem* 1594, *disacknowledge* 1598, *disrespect* 1614, *disadvise* 1636, *disbelieve* 1644, *dissatisfy* 1666. Though it is basically the concept of contradictory opposition that is expressed ('not . . .'), contrary opposition is often implied, as in *disrelish* 'dislike' 1548, *disimprove* 'render worse' 1642, *disregard* 1641 (esp. in earlier use), *disremember* 'forget' 1815, *disown* 'refuse to acknowledge as one's own; repudiate, disclaim' 1649.

In a few cases, the prefix conveys the meaning 'cease to . . .', as in *disuse* (chiefly in the form *disused*, though) 1487, *discontinue* 1479.

3. 18. 4.   Reversal, undoing of the verbal action was implied in the loans *dishonor* 1300, *disarm* 1314, *disclose*, orig. 'unclose, unfold' 1393. It is difficult to tell whether verbs found before 1500 are anything but loans. Of *disarray* 1470, *disjoin* 1483, *discouple* 1489, *disannex* 1495, *dispossess* 1494, *discompose* 1483, *discompose* is the only verb for which no French pattern appears to be recorded. For *disinherit* 1450 (from *inherit* with the now obsolete meaning 'make heir') no pattern has been found, either, but it doubtless existed in Anglo-French legal terminology. It is probably safe to assume that by about 1500 the reversative pattern had become established in English.

After 1500 are recorded *disappear* 1530, *disanimate* 1538, *dismount* 1544, *dishallow* 1552, *disunite* 1560, *discrown* 1586, *disestablish* 1598, *disinfect* 1598, *dishearten* 1599, *disassociate* 1603, *discanonize* 1605, *dislink* 1610, *disanoint* 1648, *disqualify* 1718, *disarrange* 1744, *disconnect* 1770, *disorganize* 1793, *disintegrate* 1796, *disharmonize* 1801, *dishabituate* 1868, *disassemble* (machinery, a watch) 1922.

3. 18. 5.   There are in particular many verbs beginning with *en-* (*em-*, *in-*, *im-*), either as a prefix (e.g. *en-tangle*, *im-prison*) or as an unanalysable constituent (e.g. *endow*, *inter*). This more recent pattern is likewise due to French where the type *désenchanter* has been very productive. Around 1600 we find the first loans, such as *disenchant* 1586, *disencumber* 1598, *disenamor* 1598, *disinter* 1611, *disengage* 1611 (F *désenchanter*, *désencombrer*, obs. *désenamourer*, *désenterrer*, *désengager* respectively). But the type was obviously not felt to be different from the reversative type in general, as we have early coinages, even with a non-Romance basis such as *disentangle* 1598. Other exs are *disembowel* 1603, *disembellish* 1611, *disenthrone* 1608, *disimprison* 1611, *disimmure* 1611, *disembroil* 1622, *disentomb* 1626, *disenthrall* 1643, *disennoble* 1645, *disentitle* 1654, *disentrance* 1663, *disenfranchise* 1664, *disembody* 1714, *disembarrass* 1726, *disembosom* 1742, *disentwine* 1814, *disentail* (legal term) 1848, *disembower* 1856, *disendow* 1861, *disenmesh* 1868, *disentrammel* 1866, *disembed* 1885.

3. 18. 6.   Several loans from French were denominal verbs, analysable as 'remove, deprive of, rid of (what is denoted by the nominal basis)', in some cases as 'remove from . . .'. Examples are *dismember* 1297, *dishonor* c 1300, *discharge* 'relieve of a charge' c 1330, *disarm* 1314, *disfigure* 'deprive of its figure, form, shape' 1374, *disjoint* 'put out of joint' 1420 (though originally derived from the participial adjective *disjoint* = OF *desjoint*), *dislodge* 1450, *disanchor* 1470, *discharm* 'undo a charm' 1480, *discourage* 1481 (later followed by the English coinages *dishearten* 1599, as opposed to *hearten*, and *dispirit*

1647). By the second half of the 15th c. this derivative pattern appears to
have been established in English, and numerous words have been formed. The
chief semantic pattern is 'deprive of, deprive of the character, rank, privileges
of . . .', on which were coined *disfranchise* 1467, obs. *dismerit* 1484, *distune*
1484, *discommon* 1478 = *discommune* 1590, *dispark* 1542 'deprive of the
character of a park', obs. *disapparel* 1580, *disburden* 1531, *dishorn* 1558,
discountenance 1580, *dissceptre* 1591, *dispost* 1577, *disbranch* 1575, *disrank*
1599, *disquantity* 1605, *disedge* 'blunt' 1611, *discloud* 1600, *disinterest* 1612,
disabuse 1611, *disprivilege* 1617, *disgarland* 1616, *disflesh* 1620, *dispauper* 'depr.
of the privil. of a p.' 1631, *dislimb* 1662, *disfeature* 'mar the feature' 1659
(after *disfigure* ME which is OF *desfigurer*), *disbud* 1725, *diswarren* 1727, *dis-
gown* 1734, *dismast* 1747, *disrate* 1811, *disfellowship* 1831, *disfrock* 1837, *dis-
illusion* 1855, *dishorse* 1859, *discommons* 'deprive of commons in a college'
1852, not to mention rarer words such as *disfen, disfever, disflesh, disforest,
disleaf, diswig, diswindow, diswing, diswood,* all recorded as main entries in
OED.

The concept 'remove from, put out of . . .' underlies verbs such as *dislodge*
(= OF *desloger*) 1450, *displace* 1551, *dishouse* 1586, *discase* 1596, *disparish* 1593,
disorb 1606, *disbench* 1607, *disbar* 1631, *discage* 1649, *dischurch* 1651.

Of these numerous coinages (which represent only part of the words OED
lists), however, there are not too many that have general currency, and among
them verbs derived from a non-Romance word are exceptional. In common
use are *disarm, discharge, discourage,* which attracted *dishearten, dispirit,
disabuse, disillusion, dislodge, disbar, disfranchise, disfigure.* It is worth noting,
however, that *disfigure, dislodge* are no longer connected with their nominal
bases. *Disinterested* is common only as a participial adjective. With the ex-
ception of *dishearten,* which was coined after *discourage,* there is no derivative
from a non-Romance word that is commonly used. The privative pattern with
native substantives is the type *un-burden.* We have seen the same tendency
with the other types.

3. 18. 7.   *Dis-* does not in general combine with non-Romance elements. In
the group based on the concept 'not, fail to . . .', the only words in common
use are *disbelieve, distrust, disown,* and *dislike.* It should be noted that this
semantic pattern is unrivalled by *de-* or *un-* combinations. Likewise unrivalled
are verbs beginning with *disen-* (*disem-*) so that, here again, we find a few
current verbs derived from a non-Romance radical: *disentangle, disentwine,*
and *disembody* (cf. 3.15.6). The prefix is redundantly intensifying in *dis-
gruntled* (f. obs. *gruntle*) 1682 and the uncommon verbs *disannul* 1494 and
dissunder 1580.

3. 18. 8.   *Dis-* is a nominal prefix, too, combining with adjs and sbs of Ro-
mance origin. In nominal combinations, it expresses the concept of negativity,
converting the meaning of the underlying noun into its contrary or contra-
dictory opposite. A strict line between the two aspects of negativity cannot be
drawn. The derivational patterns are French: OF *des-loyal* 'not . . .' or 'the
reverse of . . .', OF *des-confort* 'lack of . . .' or 'the reverse of . . .'.

English borrowed many adjs from French in which the prf conveyed the
nuance of either contrary or contradictory opposition, as in *dishonest* 1386,

disobedient 14.., *discomfortable* 1413, *disnatural* 1430, *disloyal* 1477. The pattern led to such coinages as *discontent* 1494, *dispassionate* 1594, *discourteous* 1578, *disquiet* 1587, *disadvantageous* 1603, *dissimilar* 1621, *disaffected* 'disloyal' 1632, *disingenuous* 1655, *disharmonious* 1659, *discontinuous* 1667, *disrespectful* 1677, *disuniform* 1687, *disreputable* 1772, *disrespectable* 1813, *disapprobative* 1824, *dissymmetric* 1867.

The sense 'absence, lack of . . .' underlies the loans *disease* 'lack of ease' 1330—1623, *discomfort* 1375, *discontinuance* 1398, *distrust* 1513, *discommodity* 1513, *disuse* 1552, *disproportion* 1555, *discredit* 1565, *discontinuity* 1570, *disability* 1580, *disharmony* 1602, *disaffection* 1605, *disfellowship* 'exclusion from f.' 1608, *discontinuation* 1611, *disunity* 1632, *disregard* 1665, *dispassion* 1692, *dispeace* 1825, *disutility* 1879.

The shade of contrary opposition ('the reverse of . . .') primarily underlies the loans *dishonor* 1300, *disobedience* 1400, *displeasure* 1470, *disloyalty* 1481, *disagreement* 1495. Formed on the pattern are *disorder* 1530, *disadvantage* 1530 H, *disfavor* 1533, *discourtesy* 1555, *dislike* 1577, attracting *distaste* 1598, *disservice* 1599, *disunion* 1598, *disconformity* 1602, *disesteem* 1603, *disaffirmance* 1610, *disapproval* 1622, *disrelish* 1625, *disapprobation* 1647, *disbelief* 1672, *disinclination* 1647, *disaccord* 1809, *disassimilation* (physiological term 'reversal of assimilation') 1880.

It will be noted that several of the preceding examples can also be analysed as suffixal derivatives from *dis-* combinations, as *disagreement* (*disagree*), *disloyalty* (*disloyal*), *disobedience* (*disobedient*), *discontinuance*, *discontinuation* (*discontinue*), *disapproval* (*disapprove*) and others. There is no doubt about *disagreeable* which in its original sense 'disagreeing, discordant' 1400 is derivationally connected with *disagree* vb; the meaning 'unpleasant' is not recorded before 1698.

3. 18. 9. *Dis-* combines only with Romance adjs, chiefly such as have a learned or academic tinge. In productivity it cannot compete with *un-* which is far more common with words of general currency. Though adjs like *discomfortable*, *dissatisfactory*, *dissocial* exist, the commonly used words are *uncomfortable*, *unsatisfactory*, *unsocial*. As far as prefixal derivation is concerned, these are the counterparts of the unprefixed adjs.

Dis- is equally unusual with non-Romance substantives. The three that are common are nominal derivatives from the verbs which we have already mentioned (3. 18. 7): *distrust* 1513, *dislike* 1577, and *disbelief* 1672.

3. 19. 1. **en-, em-** /ɛn, ɪn; ɛm, ɪm/

originated in ME loans from French. The retention of the level [e] before nasal consonants as against central Old French pronunciation [ãn] is a regular feature of Anglo-Norman (see Pope op. cit. footnote 63 a, §§ 1084 and 1088). For the allomorphs [im, in] see below 3. 19. 6. The various English types of coining were all in existence in French which had itself inherited them from Latin. The types are en c a g e 'put into a cage' / en c r o w n 'put a crown on a p. or th.', en s l a v e / en f e e b l e 'make (into) . . .', en w r a p 'wrap up'. Before 1450 there are few Ec, the majority of words occuring are loans from French, as *enamor, enchain, encharge, encircle, enchase, encurtain, endamage, enfeoff, enfeeble, engross, enrich*. Many have died out, as *enarm, englue, enoil, enchase* 'hunt' a.o.

3. 19. 2.   Type en c a g e 'put in . . .'.

In many French words the meaning 'put in . . .' was easily abstracted, as in *enamor, enchain, encharge*, obs. *enarm*. Others could be analysed as 'affect, cover or the like with . . .' or 'put a . . . on a p. or th.' as *enamel, encharm, endamage/encrown, enchain*. The two shades are not always clearly separable, but the first one is greatly predominant. Early Ec are *embow* 'bend into a bow' 1400, *embliss* 'make happy' c 1430, obs. *embrace* 'fix with a brace' 1475, *endanger* 1477, *encrown* 1486, obs. *embull* 'publish in a bull' 1480, *enhungered* 1480. The most productive period was the 16th c. which formed *emball, embay, emblazon*, o. *embloom, embody*, o. *emborder, embosom, embower*, o. *enage, encage, encamp*, o. *enchronicle, encipher*, o. *encloister, encloud, encoffin, encompass, encradle, endungeon, enflesh, enflower, enfold, engarland, engulf*, o. *enharbor*, o. *enhazard*, o. *enkennel*, o. *enrail, ensheath, enshroud, enshrine*, o. *ensnarl, ensnare, entomb, entrench, entrap*, o. *envault, enwall*. From the 17th c., chiefly the first half, are recorded *embank*, o. *embeam*, o. *embillow*, o. *embladder* (1662), *emblaze, embog, embox, embrangle* (1664), *encase*, o. *enchurch* (1681), *encolor, encurl, enfetter*, o. *enforest, enfrenzy* (1656), *englobe, engrace, enhearse, enheaven* (1652), *enjail, enjewel, enlist* (1698), *ensoul, ensphere, enstamp, enwreathe*. Later came *embale* 1727, *embed* 1778, *emblossom* 1766, *enfever* 1799, *encapsule* 1877 (Phys.), *encash* 'convert into cash' 1861 (= F *encaisser*), *encyst* 1845, *enhalo* 1842, *engroove* 1842, *enrapture* 1740, *ensepulchre* 1820, *enregiment* 1831, *enframe* 1848, *enface* (after *endorse*) 1861, *entrain* 1881 (orig. a British Army term like its opposite *detrain* 1881), *embus* 1915, *emplane* 1923.

The original and dominant sense is 'put into . . .'. But we have occasionally transitive uses with the meaning 'put oneself into, enter . . .', as in *embark* 1580 H, obs. *embreach* 1581, *enlist* 1776 H, *enroll* (not mentioned in this use in OED or Spl.), *embus* 1915, *emplane* rec.

3. 19. 3.   Type en s l a v e 'make into . . .', type en f e e b l e 'make . . .'.

Only the deadjectival type has an old French pattern underlying the English loans *embellish*, o. *emblanch, enable*, o. *enfeeblish, engross, enlarge, enrich*. Ec are o. *enhardy* 1483, *endark, ennoble* 1502, o. *enclear* 1509, o. *embase* 1551, *endear* 1580, *embrave* 1579, o. *embright* 1598, *enrough* 1601, *embitter* 1603, o. *enhappy* 1626, o. *embarren* 1627, *embrown* 1667, *encrimson* 1773 / *endenizen* 1592, *enthrall* 1576, o. *envassal* 1605, *enslave* 1643, o. *encaptive* 1592.

3. 19. 4.   As there were unprefixed vbs derived from sbs or adjs alongside of such with the sf -en (*black/blacken, length/lengthen*), our prf came to be tacked on to suffixed vbs (all between 1500 and 1650): *embrighten, embolden, encolden, enliven, enharden, enhearten*; obs. are *enlengthen, enstrengthen, enquicken, ensweeten, enwiden*.

3. 19. 5.   Type en w r a p 'wrap in, wrap up'.

French had also non-denominal prefixed vbs (as a continuation of L type *invadere*) and English borrowed vbs such as *enclose, enroll, encounter* which gave rise to Ec based on the type. The tendency was, however, obviously

strengthened by the resemblance en- bore to native in-. The earliest words found are *enlighten* and *enwrap* (both 1382, in Wyclif), occurring as *enwrappid* ptc., *inwrappyde* pret. and *inligtened* (which may be a suffixal derivative from OE *inlihtan*). In the 15th c. there followed the now obs. vbs *embraid* 'upbraid' 1481 and *embraid* 'plait' 1491. Other coinages are 16th c. and later. The prf adds a slightly intensifying nuance, if any, to the simple vb. Examples are *encover* 1520, *emblaze* 1522 'render famous', *engird* 1566, *enkindle* 1548, *enlink* 1560, *enclasp* 1596, *engrasp* 1593, *entwine* 1597, *entrust* 1602, *embind* 1628, *encheer* 1605, *encolor* 1648, *enclothe* 1832, *enwind* 1850.

Of the types discussed, *encage* has been the strongest, and it is the only one still productive.

3. 19. 6.   We have already pointed out that so long ago as ME the prf *em-*, *en-* was felt to be connected or identical with native *in-*. As early as the 14th c. we have by-forms in *in-*, *im-* to most *en-*, *em-* vbs. The practice is still in existence though in many cases one of the forms is either obsolete or otherwise differentiated (as the pairs *inquire/enquire*, *indorse/endorse*, *insure/ensure*). With *breathe* three forms exist: *embreathe*, *inbreathe* and *imbreathe*—*inbreathe* being the oldest (14th c.). The coining is obviously influenced by L *inspirare*. And this is how a third element comes in. Latin had all the types English inherited from French, and it is practically impossible to tell whether in this or that word the prf is Latin or native *in-* though in learned words the prf can safely be considered as Latin. With *en-*, *em-* the pronunciation is still often [en, em], but its allomorphs are [ɪn, ɪm]. Semantically there is but one prf, in which three different elements are combined, though in one or the other case this or that element is felt to be predominant. As most vbs have or have had both *en-*, *in-* resp. *em-*,*im-*, I give only such words here for which no counterparts in *en-*, *em-* appear to have been coined: *imburse* 1530 (now rare, repr. LL *imbursare*), *impack* "pack in" 1590 (rare), *immingle* 1606, *inspirit* 1610, *impalace* 1611, *imbark* "enclose in bark" (as different from *embark* "go on board") 1647, *impalsy* 'affect with p.' 1750, *impersonify* 1804, *impave* "pave in" 1830 (rare).

Obsolete *in-*, *im-* spellings are now *imposer*, *impoison*, *incamp*, *incompass*, *inlist*, *inclasp*, *infranchise*, *ingender*, *inglobe*, *inglut*, *inhearse*, *inleague*, *inroll* a.o. Obsolete *en-*, *em-* spellings are *enstate*, *envigor*, *empledge*, *empassion* a.o. But as the tendency to spell *en-*, *em-* is predominant, the number of obsolete forms of this group is smaller. The prf is unstressed.

3. 20.   epi- /ˈɛpɪ/

was a prefix in Old Greek with both deverbal and denominal derivatives. In its latter function it has been used in Neo-Latin scientific phraseology. Hence its use in English where it forms words on an OGr resp. NL basis. Before a vowel it becomes [ep-], but contrary to OGr usage, it is preserved before [h]. The respective OGr types are epigastrios 'situated on or over (the stomach)', epigastrion 'the part situated over the stomach'. The words are chiefly terms of anatomy and biology; a few belong to geology. In the main, they are 19th c. or later words. Examples are *epaxial*, *epibasal*, *epicentral*, *epifocal*, *epicerebral*, *epiclinal*, *epichordal*, *epicranial*, *epidendral*,

epidermatous, epihyal, epigynous etc. | *epiblast, epicalyx, epidermis, epiglottis, epiphragm, episperm, episternum, epithelium* etc.

In modern chemistry the prf is "employed in the names *epibromhydrin, epichlorhydrin* . . . denoting substances of analogous composition belonging respectively to the *bromhydrin, chlorhydrin* . . . series" (OED). In mineralogy *epi-* "is prefixed to the names of certain minerals to form names of other minerals closely resembling them in composition, as in *Epiboulangerite*, a sulph-antimonide of lead resulting from the decomposition of *boulangerite*" (OED).

3. 21. ex- /ɛks/

The prf goes back to Late and Medieval Latin usage in words such as *ex-patricius* 'ex-patrician', *ex-consul* 'ex-consul'. Imitation of this usage begins rather late in English (as it does in German and French), app. not before the end of the 18th c. *Exconsul* 1398, *ex-consular* 1683 are adapted Latin. Ec are *ex-bishop* 1793, *ex-mayor* 1796, *ex-ambassador* 1805, *ex-courtier* 1806. More recent are *ex-emperor, -empress, -king, -commander, -president, -professor, -proprietor, -secretary, -husband, -wife, -Army officer, -Navy lieutenant, -service man, -Freedom Partisan Fighters* (Times Weekly 3. 688. 20).

With adjs, the prf has not become successful. 19th c. words such as *ex-Russian, ex-learned, ex-Liberal, ex-boarded out* (q. in OED) do not represent common usage. In the *ex-rich* (A. Huxley, Point Counter Point 540) the adj is used as a primary.

In scientific terminology words have been coined on a Neo-Latin basis. The types are **exsanguis** (CL) and **excaudatus** (LL). The meaning of these parasynthetic adjs is 'deprived of, void of . . .'. Examples are *exalbuminous, excaudate, exarticulate, exappendiculate, exstipulate*.

On the semantic basis 'outside . . .' are formed *exterritorial* 1880, *excentral* 1847, *exorbital* 1876, *exinguinal* 1884. There is no Classical Latin type for them, they are even outsiders in English, *extra-* being the normal prf for words on this notional basis.

3. 22. 1. extra- /ˈɛkstrə/

forms parasynthetic adjs on a Latin basis of coining. The type is **extra-mundane**, the meaning 'outside, outside the scope of . . .'. CL is *extra-ordinarius*, LL are *extramundanus, extramuranus* 'extramural', *extranaturalis* (Tertullianus), ML *extraprovincialis* a.o. The starting-point for Ec seems to be *extraordinary* 1460 which was orig. used with the meaning 'out of the usual order', as opposed to *ordinary*. Later come *extra-decretal* 1563/87, *-judicial* 1630, *-legal* 1644, *-regular* 1649, *-essential* 1652, *-parochial* 1674/81, *-lineal* 1691, *-uterine* 1709, *-Britannic* 1770, *-urban* 1773, *-tabular* 1780, *-jugal* 1782, *-tropical* 1783, *-professional* 1799. Most of the coinages, however, which are in use today, date from the 19th c., as *extra-alimentary, -carpal, -cerebral, -corporeal, -curricular, -embryonic, -governmental, -historic, -marital, -parental, -sacerdotal, -scriptural, -territorial, -spectral, -orbital, -stomachal, -vaginal, -visceral, -vascular*.

Coinings on a native basis are exceptional: *extra-hundredal, extra-red* (= *infra-red*).

3. 22. 2. Type éxtra stróng.

The OED suggests that *extra* is short for *extraordinary*. As a matter of fact, *extraordinary* could be used as an adverb in the 17th c. (*extraordinary expensive, extraordinary good* etc.). One inconvenience with this explanation is that the last quotation for this usage is from 1778 while the first quotation for *extra, extra-special,* is from 1823. A greater inconvenience is the fact that the use in question started with trade designations of size, as *extra elephant folio, extra foolscap* (1811) which can not be explained as **extraordinary elephant folio* etc. I would propose another explanation. I think the type is exactly parallel to *anti-court party.* The semantic nuance 'beyond, more than . . .' needed is that of *extra-natural* 1794 for which the OED has the quotation *extra-natural statesman*, i.e. one whose qualities are beyond the natural. Cbs such as *extra foolscap size, extra elephant folio* would in most of all cases naturally be shortened into *extra foolscap, extra elephant.* From the use of *extra* with preadjunctal sbs developed cbs with adjs. While there was first only a late 'special edition' (of newspapers), a second, extra-special one was added. Later the type was extended to other adjs, as in *extra strong, extra fine, extra dry, extra condensed.* But usage has kept to its sphere of origin, i.e. trade designations.

Extra as an adj (extra pay, *extra fees, extra work* etc.) is merely a clipping of *extraordinary* which, in the sense of 'additional' has been traced to 1585 by the OED. The first quotation for adj *extra* in the OED is from 1776.

3. 23. 1. fore- /for, fɔr, fɔ/

is by origin a locative particle with the meaning 'before', with respect to place as well as time.

With vbs it had become, as early as OE, an inseparable prf. We have a few vbs from this oldest period, both with locative and temporal meaning. To the locative group belong *forerun, forego* 'precede', *forelie, foregird* and some other archaical vbs, to the temporal one *foresee, foresay, forethink,* obs. *forewit* (*wit* 'know'), all meaning '. . . beforehand'. The locative group was practically dead in ME. In the temporal group there have been coinings down to the 17th c., but most of them have an archaic ring now. ME are *forecast, foredestine, foreguess, forelook, foreordain, forespeak, foretell, forewarn,* obs. *forechoose.* 15th c. are *foreknow* and *foretaste.* Newer coinings are chiefly from the 16th c., as *foreappoint, forearm, foreconceive, foredoom, forefeel, forehear, foreintend, forejudge, forelive, foremention, foreshadow, foreshow, foresignify.* From the 17th c. date *forebode* 1603, *foreact* 1618, *fore-reach* 1644. Many 16th c. words are extinct today.

3. 23. 2. Nominal cbs likewise go back to OE. In the purely nominal words the prf has adjunctal functions. The strongest group is that represented by the type forefinger. Many of the words are technical terms, and of these most are nautical. The meaning of the prf is 'situated in front, front'. OE are *forehead, forelock* 'hair at the front part', *foretooth, foreship.* ME are *forecastle, fore-end, forepart, foreside, forestay, foreland* 'promontory', obs. *forestage* 'forecastle', *foreman, foresleeve, foretop* (of the head). From the 15th c. are recorded *forefinger, forefoot, foreleg, forefront, forehorse, forelock, foresail* (naut.); from the

16th c. *forename, foreskin* 'prepuce', *forecourt, foregate,* obs. *forefence* 'front defence, bulwark', *forehand* (*hand* in various technical senses), *foremast,* obs. *foredeck.* 17th c. are the naut. terms *forepeak, foreyard, foresheet, foretack* / *foreground, fore-edge* 'front edge of a book'. From the 18th c. we get *forearm, forepiece, forewoman, foreshore,* from the 19th c. *foreword, forestick* U.S., and the naut. terms *forecabin, forebody, forehook.*

With the temporal nuance 'preceding, previous, preliminary' are formed obs. *forespeech* OE 'introductory speech', *forefather, foreelders* ME, *forenight* in o. sense 'previous night' 1513, *foremother* 1582, *forepurpose* 'p. settled beforehand' 1551, *foregame* 1594, *foretime* 1640 'past'.

3. 23. 3.   Deverbal sbs have meanings explained from their corresponding vbs, as *foretoken* OE, *forelook, foresight, foretaste, forethought,* obs. *forewit* (all ME), *foredoom, foreknowledge* (16th c.), *foreshadow* 1831. In all these, *fore-* conveys the idea 'with reference to the future'.

Agent-sbs are *foreganger, forerunner* (ME), *forerider* 1470. *Forenoon* 1506 is patterned on *afternoon,* i.e. it is a prepositional group (as the stress on the root indicates; but forestress is also heard).

Verbs have the main stress on the root, nouns on the prefix (with the exception of *forenoon*).

3. 24. 1.   **hyper-** /'haɪpə(r)/

is found with sbs and adjs and conveys the meaning 'over, too much, extraordinary (-ily), to excess'. The types are ultimately Old Greek, as *hyperasthenḗs* 'excessively weak', *hyperagathótēs* 'excessive goodness', *hyperthermasía* 'excessive heat'. ML and NL adopted many Greek words and formed new ones from Greek as well as Latin roots. English *hyper-* words occur as early as LME, but are esp. frequent in the 17th c., the majority being anglicizations of OGr terms of rhetoric, prosody and the like. From about 1600 on, *hyper-* can be considered an English formative with learned words, chiefly adjs. 17th c. are *hyper-angelical, -archepiscopal, -diabolical, -prophetical, -magnetic, -sceptical, -superlative, -physical, -metric* etc. The sense is not necessarily the modern one implying excess, *hyper-* often merely means 'that which is beyond . . .', as in *hyper-angelical, -physical, -metrical* a.o.

3. 24. 2.   There seem to be no coinages in the 18th c., but the 19th c. has many. In general words the nuance implied is always that of 'too much, unduly excessive' or the like. The majority of new formations are adjs, such as *hyper-accurate, -active, -acute, -fastidious, -idealistic, -moral, -neurotic, -obtrusive, -orthodox, -ridiculous, -sentimental.* Sbs are chiefly deadjectival derivatives: *hyper-activity, -acuteness, -conscientiousness, -conservatism* a.o. Occasionally we find vbs such as *hyper-emphasize, -realize, -vitalize* which are, however, uncommon.

3. 24. 3.   The OGr type *hyperthermasia,* adopted into Latin, is used in medical phraseology, chiefly words of the 19th c. The basis of coining is Neo-Latin, and many English words are used in NL form which need not be the OGr one. As a matter of fact, many of the modern terms did not exist in OGr,

but others did, in a different form, however (cf. NL and E *hyperaemia* as against OGr *hyperaimosis*, for instance). All these words denote some excessive, abnormal bodily condition, as *hyper-aesthesia, -kinesia, -metropia, -opia, -ostosis, -piesia, -pituitarism, -plasia, -pnea, -pyrexia, -thyroidism*, and many others. From them can be derived adjs, as *hyper-aemic, -kinetic* etc.

In chemistry, *hyper-* denotes the highest in a series of oxygen compounds (as in *hyperoxide*). But in this sense, *per-* is now preferred.

OGr *hyper-* was used in various shades of meanings to denote position ('over, above'). In English, this pattern occurs only with terms of ancient Greek and medieval music, and with mathematical and biological terms (for detailed treatment see OED).

3.25. hypo- /'haɪpo/

is the semantic opposite of *hyper-*, but lacks its formative range. It forms words on a NL basis of coining from Greek roots (with elision of *o* before a vowel), chiefly terms of anatomy and zoology. The major type is the adjectival one hypodermic 'lying under . . .'. OGr was rich in such parasynthetic adjs, and NL adopted the type. Ec are all 19th c., as *hyparterial, hypaxial, hypo- basal, -branchial, -phyllous, -glossal, -sternal*.

In terms of chemistry, *hypo-* (in contrast with *hyper-*) indicates a lower state of oxidation, or a low position in a series of compounds. Its use with terms of ancient Greek and medieval music is parallel to that of *hyper-* (see OED).

Hypo- has not formed adjs of general character parallel to the type *hyper- accurate*. It does convey the shade 'slightly, somewhat, deficiently', but only in technical terms, as *hypo-acid, -active, -alkaline, -toxic*. These as well as the terms of chemistry and music are coined on an English basis, i.e. *hypo-* is the form of the prf before a vowel also.

3.26.1. in- /ɪn/

as a negative prf is used with adjs and sbs of Latin or French origin. To adjs it conveys the meaning 'un-, not', to sbs the meaning 'want, lack, absence of'. Beginning with the 14th c. we have loans from French which are, at the same time, Latin. The form of many words shows, however, that Latin influence has been predominant. 14th and 15th c. are *incomprehensible, infirm, infinite, inflexible, inordinate, ineffectual, indiscreet, intolerable, insensible, innumerable, innominable, inscrutable, incombustible, inexpugnable, inhuman* / *incontinence, ingratitude, injustice, infidelity, infelicity, inconvenience, inability, incredulity, incommodity, inhumanity*. About 1500 the prf can be considered an independent formative.

3.26.2. From the 16th c. are recorded *inextinguishable, insufferable, inseparate, infrequent, inaccessible, inanimate, infertile, inglorious, inconsequent, inimitable, inhospitable*, from the 17th c. *intransgressible, inurbane, inofficious, insusceptible, intangible, insecure, insensitive, inexpressible, inexpressive, inharmonic, injudicious, insupposable, insuppressible, insurmountable, inadequate, inadvertent, inalienable, inarticulate, incoherent, inexperienced*, from the 18th

c. *inadmissible, incautious, inharmonious, incalculable, inirritable, inorganic,* from the 19th c. *inaccordant, inextensible, insubmergible, insubmissive, insubordinate, intranscalent, intransferable, inoxidizable, inexplosive, insanitary, inexpansible,* to give only a few examples.

Sbs are in consider a tion, *inhospitality, inexperience, incivility, inclemency, inutility, inconsequence* (all 16th c.), *incoherence, inabstinence, inactivity, inaptitude, incapacity, incompetence, inobservance, inexecution, insobriety* (all 17th c.), *inaction, inapplication, inattention, incaution, inanimation, inexactitude, indiscipline, inexertion, insubordination, inoccupation, intolerance* (all 18th c.), *incelebrity, incivilization, inextension, inorganization, insanitation, irrecognition, irreflection, irrelation.*

3. 26. 3.   At all times, *in-* has been prefixed in accordance with Latin rules, i.e. *in-* is assimilated to *il-* before *l,* to *im-* before *m, b, p,* to *ir-* before *r*: *illegible, illimitable, illoricated, imponderable, immarginate, impennate, irreplaceable, irrebuttable, irreciprocal* etc.

3. 26. 4.   The analysis of sbs with an adjectival basis offers difficulties sometimes. While it is easy to tell that *insignificance* or *inopportunity* are not the opposites of *significance* resp. *opportunity* but suffixal derivatives from *insignificant, inopportune,* it is doubtful whether *inadaptability, inaccurateness, incompleteness,* to mention only a few instances, are prefix formations of *adaptability, accurateness, completeness,* or suffixal derivatives from *inadaptable, inaccurate, incomplete.* The truth is probably that they are doubly connected. The stronger tie seems, however, to be the one through the prf as there are many coinages with which suffixal derivation is out of the question. *Inhospitality, incelebrity, incapacity, insobriety* can only be analysed as prefixed sbs. The assertion of the OED that *in-* is a prf with adjs and their derivatives, rarely with other words, is, however, correct on the whole.

Vbs such as *illegalize, immortalize* are suffixal derivatives from *illegal, immortal.*

3. 26. 5.   The prf is not used with words beginning with *in-,* for reasons of euphony. There are no *in-* counterparts for *uninhabitable, unintelligible* etc.

With adjs the stronger rival has been native *un-* which is ousting *in-* more and more. In EMoE *in-* could be prefixed to almost any adj with a Latin or French basis. However, words such as *inconscionable, improfitable, inchangeable, impleasing, impopular, incertain, inchaste, incharitable, inceremonious, incomfortable, inimaginable, intenable, inutterable, inorganical* a.o. have given way to *un-* adjs. The prf *in-* was formerly also attached to second ptcs, a usage which is now growing obsolete. There are a few of them in PE, as *illimited* 1602, *inconfused* 1626, *inexhausted* 1626, *inelaborated* 1623, *inextended* 1739, *inedited* 1760, whereas 16th and 17th c. English knew *incircumcised, incivilized, incompared, incomposed, inconcerned, inconnected, incultivated, indigested, indisputed, insuspected, incontrolled, indiscussed, inexpected, informed* etc. With adjs that are in general use there is likewise a tendency to use *un-.* Newly coined adjs with *in-* have a learned, scientific character: *insubmergible* 1808, *innutrient* 1822, *irremissive* 1817, *inextensible* 1840, *insubmissive* 1841, *irresponsive* 1846, *intranscalent* 1846, *insubordinate* 1849, *intransferable* 1859. The 20th c. does not seem to have made use of the prf for new formations.

3. 26. 6.   Some *in-* adjs have by-forms with the prf *un-*. The words *undescribable, unelastic, unexact, unredeemable, unreplaceable* are, however, less common than their *in-* counterparts, while *impractical* (termed 'rare' in the OED) is the common American word for British English *unpractical*. On the other hand, *inhuman* means 'brutal' while *unhuman* has the meaning 'not human, super-human'; *unmoral* merely means 'not moral, non-moral', whereas *immoral* is more or less an equivalent of *licentious*. On the whole, the difference between *in-* and *un-* is that the latter is the regular negative prefix with adjs belonging to the common vocabulary of the language and accordingly stresses more strongly the derivative character of the negatived adj. The prf *in-*, however, can only claim a restricted sphere: it forms learned, chiefly scientific, words and therefore has morphemic value with those speakers only who are acquainted with Latin and French. This restricted formative character of the prefix is even more in evidence with adjs which are not analysable as composites in English (*ineffable, inept, incult, ineradicable* etc.), but are derived on a purely Latin basis.

3. 26. 7.   While with adjs, *in-* is receding before *un-*, the same competition does not exist for sbs where *un-* is much weaker. This explains why alongside of *unequal, unable, unjust, unstable* a.o. (which have replaced words with *in-*) we have the sbs *inequality, inability, injustice, instability* a.o. which have not changed. *Unrecognition* 1869 is as rare as *irrecognition* 1820.

3. 27. 1.   inter- /'ɪntə(r)/

is a prf with both verbal and nominal derivatives. Verbal formation partly arose out of loans from OF and is therefore older, whereas the formation of sbs and adjs started in imitation of Latin patterns.

OF *entre-* with vbs had two meanings: it either meant 'between, among, together with' or, with reflexive vbs, expressed the sense of reciprocality. English has not developed this second type, though to a certain extent reciprocality is expressed by English *inter-*, as we shall see. This is not, however, directly influenced by French. The chief group is that of vbs with the basic meaning 'put' to which *inter-* conveys the sense 'do the action between or among things or persons'. The first words occur towards the end of the 14th c., but the majority have been coined since 1500. I should hardly say that the type is entirely due to French, as most of the Ecs were made after a great many Latin *inter-* vbs had been adapted. Loans from French are *interchange* 1374, *intermeddle* c 1384 (= AF *entremedler* fr. OF *entremesler*), obs. *entermete* 'intermeddle' (= OF *entremetre*) and the 16th c. words *interpose*, obs. *interseam* (= F *entresemer*), *interlard, interject*. The popular development of L *inter* in F was *entre*, but as early as the 14th c. French had latinizing forms in *inter-* (as *interposer, interjeter* a.o.), and though we have down to about 1600 English words in *enter-*, English had long before followed the Latin pattern *inter-*. Anglicized Latin are *interline* ME, *interpone, interfuse*, o. *intersert, intersperse*, obs. *intertex* (all 16th c.) a.o. It is thus on the combined Latin-French basis that English vbs have been coined. But the prf has from the beginning been attached to both Romance and native roots.

3. 27. 2. With verbs, *inter-* conveys two shades of meaning: 1) '. . . between or among other persons or things' (as *intermediate*) resp. with denominal verbs 'put in . . . between etc.' (as *interpoint*, *interleave*); 'at intervals' (as *intershoot*). 2) '. . . between, among, in, with each other; together; mutually; reciprocally; intimately' (as *intermix*). The two groups cannot always be kept strictly apart, several vbs (*interpenetrate*, *interstratify*, *intervein* a.o.) enter both groups.

Examples for the first group are *intermediate*, *interflow*, *interlay*, *interlope* (dial. *lope* 'leap'), *intersow* (17th c.), obs. *interplace* 1548, *interbed*, *intershoot*, *interstratify* (19th c.) / *interpoint* (infl. by L *interpungere*), obs. *interpale* 'put in pales' (16th c.), *intermine* = *intervein* 'intersect with mines or veins', *interfoliate*, *interleave* (17th c.), *interpunctuate* (19th c.).

The second group is somewhat larger. Loans from French are *intermeddle* 1384, *interchange* c. 1374, *interlace* 1374, *intercommon* 'associate' 1430, *interplead* 1567 'litigate with each other'. With the exception of *intermingle* (1470) no Ecs occur before the 16th c. Examples are *interlink*, *intermix*, *intermarry*, *interweave*, *intercommunicate*, *interfold*, *intertangle*, *interleague* (16th c.), *interwork*, *intervisit*, *interdeal*, *interlock*, *intertwine*, *intertwist*, *interwreathe*, *interwind* (17th.), *intercross* 1711, *interblend*, *interknit*, *intertie*, *interplay*, *intergrade*, *interpenetrate*, *interbreed*, *interdepend*, *interrelated*, *interconnect* (19th c.), *inter-resist* 1902 and other less common vbs. There have been various individual attempts to introduce the prf for the expression of the idea of reciprocality with any verb or noun. S. Daniel (c 1600) and later Coleridge advocated and practised its use (see OED *inter-* I. 1. b).

Verbs formed with *inter-* have a poetic, literary, or scientific character. Most verbs occur in participial forms only or as *-ing* substantives. Of more or less general currency are *interlock*, *intermarry*, *intermingle*, perhaps *interdepend* and *interpenetrate*.

3. 27. 3. After the pattern of such Latin words as *interamnium*, *intercolumnium*, *internodium*, *interludium*, *interlunium* 'space resp. time between two . . .' a few learned technical terms have been coined, as *interaxis*, *interpilaster*, terms of architecture, *interclavicle*, a term of anatomy (19th c). *Interact* 1750 is imitated from F *entr'acte*.

3. 27. 4. On the relation adjunct/primary there have been coined several technical terms in English, the pt having the meaning 'intermediate, connecting, reciprocal'. Examples are *interspace* c 1420, the oldest word recorded, formed after *interval* c 1300 which renders L *intervallum*, obs. *interspeech* 1579, rare *interlapse*, *interlight*, *intermask*, *interthing* (17th. c.), *interleaf*, *interline* (18th c.), *interbrain*, *intercell*, *interface*, *intergrade*, *interlink*, *intertie* (19th c.), *intersex*, *intertrade* (20th c.).

The type is perh. influenced by L *interregnum*, analysed as 'intermediate reign'. But on the other hand, it was the natural consequence of the parallel types *after-effect*, *by-path*, *outhouse*, *overcoat*, *underwood* etc.

3. 27. 5. On the same adjunct/primary relation are based abstract deverbal sbs such as *inter-action* 'reciprocal action', *inter-agreement* 'mutual agreement', *inter-connection* 'mutual c.', *inter-dependence* 'mutual d.', *inter-migration* 'reciprocal m.', and the personal sb *inter-agent*. The type is weak.

The type has also been used with non-deverbal sbs denoting condition, state: *intercommunity* 1587, *intercommunion* 1711, *interculture, inter-acquaintanceship*. This group is even weaker.

3. 27. 6.   There is an adjectival type with the pt in sense 'mutually, reciprocally, intimately', illustrated by such words as *inter-active, inter-convertible, inter-dependent, inter-destructive, inter-penetrative* a.o. (all 19th c.). In *inter-mutual* 'mutual' the pt is merely intensifying.

3. 27. 7.   Another adjectival type, showing the pt in the function of a preposition, has been very productive, esp. in scientific terminology. The pattern is provided by Latin adjs such as *intercaelestis, interdigitalis, intermuralis | intermenstruus* 'situated or falling between two ...'. Examples are *inter-alveolar, inter-articular, inter-brachial, inter-branchial, inter-cellular, inter-clavicular, inter-digital, inter-muscular, inter-nasal, inter-nuclear, inter-parietal* and numerous others, all from the 19th c. Terms from anatomy and biology form the bulk of these words. A few coinages are older, as *intercostal* 1597, *interlunar* 1598, *interstellar* 1627, *intersidereal* 1656, *intermundane* 1691, *inter-crural* 1693, *interscapular* 1721, *interfoliaceous* 1760, *interamnian* 1774, *inter-vertebral* 1782.

3. 27. 8.   The number of adjs expressing the idea 'happening in the period between two ...' is much smaller. Examples are *interconciliary* 1620, *inter-lunar* 1794 H, *inter-equinoctial* 1795, *intercensal* 'occ. between two censuses', *interglacial, interministerial, intermomentary, interparoxysmal, intersessional* (19th c.).

3. 27. 9.   Another variant is the type **international**, which has proved very productive. The meaning of adjs coined on the pattern is 'going on between, carried on between, interesting, belonging in common to several ...'. The type word was coined by Bentham in 1780. Later are *inter-clerical, inter-collegiate, inter-colonial, inter-confessional, inter-continental, inter-denominational, inter-departmental, inter-oceanic, inter-parliamentary, inter-provincial, inter-racial, inter-regimental, inter-territorial, inter-tribal, inter-urban, interzonal*.
    When speaking of something that includes several parts (e.g. *empire*) people sometimes use such words as *inter-cranial, inter-carpal, inter-cerebral, inter-imperial, inter-Australian* where *intra-* would be the proper pt.

3. 27. 10.   Type **inter-state relations**. Unlike the preceding Latin-coined adjs with the pt in prepositional force, these cbs with preadjunctal sbs are formed on a native basis, occurring since the 19th c. The type cb is the earliest recorded in OED, quoted from about 1845 as American usage. Today the type is widely in use. Examples are *inter-allied policy, inter-island airlines, inter-school affairs, inter-university activities*. Cbs with the temporal meaning 'occurring between ...', as *inter-war years, inter-battle periods* (q. Za 132—133) are not common.

3. 27. 11.   The stress pattern is that of middle stress/full stress in vbs, adjs and sbs of type *interaxis*. There is, however, a strong tendency to give the pt full stress with sbs of type *interaxis*. We have the pattern full stress/middle

stress in substantival cbs of type *interspace*, also in other trisyllabic sbs (as *interact, intergrowth*). Stress is functional to distinguish trisyllabic sbs from their otherwise homophonous vbs, whether there is a derivative relation between sb and vb or not. Examples are *interáct* sb/ *intaráct* vb, *interchange* sb / *interchange* vb, *intercrop* sb / *intercrop* vb, *intercross* sb / *intercross* vb, *interflow* sb / *interflow* vb, *intergrade* sb / *intergrade* vb, *interleaf* sb / *interleaf*, *interleave* vb, *interline* sb / *interline* vb, *interlink* sb / *interlink* vb, *interlock* sb / *interlock* vb, *interplay* sb / *interplay* vb, *interspace* sb / *interspace* vb, *intertie* sb / *intertie* vb, *intertwine* sb / *intertwine* vb, *intertwist* sb / *intertwist* vb.

The same distinction holds for other pairs provided the sb is a deverbal derivative, as in *intercept* sb 1821 fr. *intercépt* vb 1548, *intersect* sb 1885 fr. *intersect* vb 1615, *intervolve* sb 1898 fr. *intervolve* vb 1667, also for the old pair *interdict* sb 1297 / *interdict* vb 1290. On the other hand, a vb derived from a sb retains the stress of the sb (see 2. 38. 7) which explains vb *interlude* 1608 fr. sb *interlude* 1303, vb *interview* 1869 fr. sb *interview* 1514.

3. 28.   intra- /'ɪntrə/

forms parasynthetic adjs on a NL basis of coining. The Latin type is intramuranus 'situated inside . . .'. English words with *intra-* are 19th c. or later, most of them dating from the period after 1850. As *extra-* words are older, it is possible that they have influenced the rise and growth of *intra-* counterparts. A large group of words belong to the nomenclature of biology and medicine, as *intra-abdominal, -arterial, -branchial, -bronchial, -capsular, -cellular, -cerebral, -cranial, -ligamentous, -molecular, -muscular, -nasal, -orbital, -osteal, -oval, -uterine, -venous* etc. Non-medical are *intra-canonical* (included in the canon of Scripture), *-ecclesiastical, -divisional, -imperial, -logical, metropolitan, -parochial, -mundane, -mural, -telluric* a.o. An early cb is *intrafoliaceous* 1760.

Parallel to *interstate relations* is the type intrastate traffic. It seems to be quite recent. Examples are *intracity buses* (this and the type combination are often used in contrast to *inter-* phrases, with reference to segregational practices in the South), *intraparty division* (Senator Neuberger in the New York Times Magazine, July 7, 1957, p. 17). OED (s.v. *intra-* 2) has one instance (BE) from 1888 for *intra-station traffic*, but no other example.

3. 29. 1.   mal- /mæl/

conveys the meaning 'ill, evil, wrong, defective, improper'. It originated in loans from French where the prf had partly a negative (*maladroit, malcontent,* obs. *malapert* 'unskilful'), partly a disqualifying character. The English prf has always had the latter shade: o. *maltalent* c 1320—1828 'ill-will', o. *maladventure* c 1470 'lawless doings', o. *malapert* c 1420 'unbecoming, insolent' (as against the F meaning 'unskilful'). *Maladventure* was followed by *malversation* 'corrupt behavior (esp. as regards money) in an office of trust' 1549. But it is only in the 17th c. that *mal-* becomes productive in English, along the line of the last mentioned words, with sbs belonging to the sphere of law and administration. They all denote an improper, irregular behavior, as *maladminis-*

tration 1644, *malgovernment* 1653, *malpractice* 1671, *malexecution* 1689, *malfeasance* (law French) 1696, *malconduct* 1741. Obsolete are *mal-institution* (of the law) 1714, and *mal-publication* 1715.

3. 29. 2.   From the 18th c. on (OED: 16th c., but no examples are quoted) we have medical and physiological terms with *mal-* meaning 'defective, faulty', as *malconformation* 1776, *malformation* 1800, *malconstruction* 1809, *maladjustment* 1833, *malposition* (obstetr. term) 1836, *malnutrition* 1862, *malassimilation* 1865, *maladaptation* 1877, *malobservation* 1886, *malpropriety* 1888, *malpresentation* (obstetr. term) 1899. *Malodor* 1825 may have originated in medical use though this assumption is not necessary as a few others of the above words can also be used in a larger sense.

3. 29. 3.   The prf has never formed adjs in English: *maladroit* 1685 is F *maladroit*, *malodorous* 1850 is derived from *malodor* 1825, *malformed* 1817 from *malformation* 1800, *malorganized* 1862 from *malorganization* 1841, *malposed* 1900 from *malposition* 1836 (rather than "after *transposed*" OED). *Mal-conceited* 1608 and *mal-discontented* 1692 are nonce-wds with intensifying character in *mal-*.

The personal sb *malpractitioner* 1800 'corrupt practitioner of law or medicine' is likewise derived from *malpractice* 1671. The vb *maladminister* 1705 is derived from *maladministration* 1644, *maltreat* 1708 is F *maltraiter*, orig. also spelled *-ait* in English.

In EMoE the spelling was *male-*, perhaps under the influence of Latin loans like *malefactor* c 1440, *malefaction* 1602. From the 18th c. on, the spelling *mal-* has prevailed.

3. 30.   meta- /'mɛtə/

forms scientific words, partly on a NL, partly on a native basis of coining. It has the meaning 'transcendental' or the like in *metapsychology*, *meta-physiology*, *metabiology*, *metachemistry*, *metalogic* (all on the prototype *meta-physics*). This use is 19th c. The OED has the nonce-wd. *meta-theology* (Donne).

In terms of pathology it forms adjs applicable to diseases or symptoms with the meaning 'arising subsequently to . . ., following on . . .', as *meta-arthritic*, *meta-pneumonic*, *meta-infective*. *Meta-* is preserved before a vowel, i.e. derivation does not follow OGr rules.

In the nomenclature of anatomy and zoology, *meta-* forms sbs and adjs with the meaning 'behind, hinder, hindermost, situated at the back', as in *meta-thorax*, *metanotum*, *met-acromion*, *metabranchial*, *metafacial*, *metasthenic*, etc. The terms are often correlative with *meso-* or *pro-* words (cf. *metanotum/meso-notum*, *metaphragm/mesophragm*, *metagnathous/meso-*, *pro-gnathous* etc.

In geological terms, *meta-* is short for *metamorphic*, as in *metachemic* 'applied to chemical metamorphism'. Such words are clipping composites (see 9. 5. 1).

With terms of chemistry, *meta-* is prefixed to names of substances and conveys the meaning 'isomeric with, closely related to . . .', as in *metacresol*, *metagelatin*, *metalbumin*, *metaldehyde* etc. It is also used as "denoting certain inorganic acids and hydroxides derived from the ortho, or ordinary, form by loss of water (usually of one molecule of water from each molecule of acid or

hydroxide), as in metaphosphoric acid, HPO_3" (Webster's Collegiate Dictionary). It may also denote 'any of certain benzene derivatives or compounds analogous to them in structure' (Webster's Collegiate Dictionary).

With the basic idea of 'resemblance' it is also attached to terms of mineralogy: *metabrushite* 'a calcium phosphate allied to brushite'.

3. 31.   micro- /'maıkro/

has been in use in scientific wf chiefly since the 19th c. It is correlative with *macro-* in terms of anatomy, botany, and zoology.

In terms of biology, botany and the like, sbs with *micro-* signify 'minute size of . . .', as *micro-bacillus, -blast, -coccus, -gamete, -organism* etc. etc.

In terms of physics the prf is attached to the names of metric units with the meaning 'a millionth part of . . .', as in *micro-ampere, -angstrom, -volt, -ohm, -curie, -coulomb, -erg, -farad, -henry* etc., etc as the counterpart of *mega-*. In botany *micro-millimeter* means 'one thousandth of a millimeter'.

Micro- is often short for *microscopy* and has the meaning 'connected with the microscope' in words denoting branches of research carried on by means of microscopic examination, as *micro-chemistry, -biology, -geology, -mineralogy, -mechanics, -physics* etc., in words denoting properties or the like revealed by the microscope only, as *micro-crystalline, -granite, -foliation* etc.

Micro- is attached to names of instruments in various shades of the sense 'minute': *micro-phonograph, -seismograph, -photograph, -telephone* etc. We find this meaning also in other scientific words, as *microwave, microgroove*.

3. 32.   mid- /mıd/

is today a prefix though the OED does not list it as such. It is originally an adj, inflected down to ME, but also found as the first-word of cpds as early as OE. OE *midwinter* is used both as a cpd and as a syntactic group. As an adj *mid* is now superseded by *middle*. *Mid-* is chiefly combined with sbs. The notion of time underlies such words as *midsummer, midwinter, midday, midnight* (OE), *midmorn* a 1225, obs. *midfast(en)* c 1122 = *midlent* c 1450, *midtime* 1571, *midnoon* 1580, *midweek* 1707, *midyear* 1897, *mid-season* 1882 H. Other examples are *mid-morning, mid-afternoon, mid-November* etc., and such expressions as *in the mid-sixties*.

Place-denoting sbs are all technical terms (medical, botanic, astronomic, nautical, sports); most of them date from the MoE period: midriff (OE), *mid-brain, -breast, -chest, -finger, -kidney, -leg, -gut, -rib, -air, -heaven, -sky, -sea, -ship, -water, -land, -field, -stream*. Scotch has preserved more words with *mid-*, see OED. Recent is *mid-America*.

Since the 19th c. *mid-* can be prefixed to adjs derived from sbs denoting place or time: *mid-facial / mid-monthly, mid-Victorian*. There are also such cbs as *mid-early (potatoes)*.

3. 33. 1.   mis- /mıs/

is used with vbs and deverbal nouns (but it is rare with deverbal adjs such as *misrepresentative*). The prf formed the categories as early as OE. During the ME period, many French words with *mes-* were adopted and F *mes-* had

about the same senses *mis-* had. The two prfs naturally fused into one, and *mis-* today stands for both. It is therefore prefixed to native as well as foreign stems. Used primarily and exceedingly frequently with vbs, it conveys the meaning 'badly, wrongly, improperly, amiss', in the 15—16th c. also 'unfavorably'. Examples are misdo, *mislead, mislike, misteach, miswrite,* o. *mislive* (OE), and later *miscall, misname, misknow, misdeem, misunderstand, mistrust, mishear, misdeal, misrun, mislay, mishandle, misshape | misspend, misapply, miscarry, miscreate, misesteem, misconceive, miseducate, miscalculate, miscopy, misdeliver, misgovern, mismanage, misrepresent, misrule.*

3.33.2. Among the nominal forms of vbs, ptcs occupy a special position insofar as they have a semi-independent kind of existence. *Misshapen, misbegotten* are the only common forms of the vbs *misshape, misbeget,* and no infinitives are in use either with *misgrafted, misborn, misgotten, mis-sworn* 'forsworn', *misgrounded, misproportioned.* We observe a similar tendency with neg. *un-, under-,* and *over-.* It is this independence which temporarily caused *mis-* to become a quasi-adverb which could follow the ptc (between 1225 and 1450, see OED).

3.33.3. Deverbal sbs are esp. frequent. As with the preceding group, the corresponding vb is often not in existence. Such sbs are coined in their own right; they have the meaning 'wrong, improper, incorrect, bad, lacking (formerly also 'evil') . . .'. The type is likewise OE, (but only *misdeed* has survived into MoE). Examples are *misadvice, misalliance, misapprehension, misarrangement, misbehavior, misbelief, miscarriage, mischoice, miscomputation, misconception, misconduct, miscounsel, misdeed, misdirection, miseducation, misesteem, misexposition, misfit, misgovernment, misgrowth, misjudgment, mismanagement, misprint, misrule, mispronunciation, misworship.*

3.33.4. Cbs with non-deverbal sbs are uncommon. Examples are *misword* ME, *misfortune* 1502, *misventure* 1563, *misdevotion* 1612, *misreligion* 1623, *misintelligence* 1639, *misconjecture* 1646, *miscreed* 1821, *misfeature* 1821, *misproportion* 1825, *miscue* 1873 (a billiard term). Orig. loans from French are *misadventure, mischance, misease.*

3.33.5. English has very few adjs with *mis-.* Prefixed adjs are *misproud* ME, *miszealous* 1617, perh. obs. *misruly* 'unruly' (ME-1598). *Misfortunate* 1530 is backderived from *misfortune, miscontent.* There are a few possessive adjs, prob. influenced by pret. ptcs, as *mismated, misminded, misnatured, misprincipled.* The normal type for them is, however, *ill-minded.*

The prf has been productive in all periods of the language. A good proportion of the preceding examples date from the ME period, a good deal were coined between about 1550 and 1650, which was the most fertile age for the coining of words, anyhow. *Mis-* was a vogue-prefix with Bacon, Donne, and Jos. Hall.

3.33.6. The stress problem seems to offer difficulties. According to OED and Webster, the prf never bears the main stress. In recent usage, however, disyllabic sbs may have forestress (Kenyon-Knott give only *míshap* and *místprint* as a second pronunciation), so one also hears *misdéèd, mischoice,*

misrule, misgrowth, mishap; it also occurs in short converted vbs, as *a misfit, a misprint*. In all these cases, the radical has a middle stress. With vbs and deverbal derivatives the stress pattern is as indicated in *misprint, mismánagement,* i.e. the main stress is on the radical while the prf has a middle stress.

3. 34. mono- /ˈmʊno/

forms scientific words only. The cbs are chiefly extended bahuvrihi adjs (type m o n o d a c t y l o u s 'having one finger'), but there are also unextended bahuvrihi cpds which may be both adjs and sbs (type m o n o c o t y l e d o n 'plant having one cotyledon', m o n o p h a s e 'exhibiting one phase').

New formations have been made since the 18th c., chiefly with the establishment of the Linnaean system. Examples are *monocarpellary, monocarpic, monostylous, monopetalous, monophyllous, monocardian, monolobular, monoganglian, monozoic* etc. The 19th c. has added many terms belonging to chemistry, as *monobasic, monoacid* (or *monacid*), *monochloride, monoxide, monocarbon* etc. all meaning 'having one . . .'. In most cases the radical is Greek, but there are also cbs with a Latin radical: *mono-carbon, -cellular, -tint, -valent.*

The words are coined on a Neo-Latin basis, with the final vowel usually elided before the vowel of a radical (but also *mono-acid* besides *monacid*).

3. 35. 1. multi- /ˈmʌltɪ/

is used in scientific or technical terminology and with a few learned words of a more general character. The original types are the Latin parasynthetic adj types m u l t i f o r m i s and m u l t i d e n t a t u s meaning 'many -ed'. We find Ec chiefly from the 19th c. on. Examples are *multi-angular, -cellular, -cuspid, -dentate, -florous, -ganglionic, -jugate, -lateral, -laminar, -lobar, -nuclear, -ovular / -fluvian, -personal, -sensual, -titular.*

3. 35. 2. After the preceding group there were coined possessive adjs of the corresponding native type m u l t i b l a d e d: *multibranched, -faced, -hued, -pointed, -rooted, -toed, -voiced, -motored.* The type is uncommon, however.

Multi- is also prefixed to preadjunctal sbs of the type m u l t i s p e e d (m o t o r): *multi-charge, -coil, -cylinder, -motor, -phase.* The rise of the type was perhaps favored by *multiform* 1603 and *multivalve* 1753 which look like our type, but in reality represent the Latin parasynthetic adjs *multiformis* and *multivalvis.*

3. 35. 3. As bahuvrihi sbs were coined *multicycle* and *multifoil. Multimillionaire* and *multispecialist* are perh. ultimately to be analysed as 'having many millions resp. specialties'. *Multifold* and *multigraph* are variants of the regular words *manifold* and *polygraph.*

The words coined on a NL basis change *multi-* to *mult-* before a vowel: *multangular, multanimous, multarticulate* acc. to Latin rules, but *multi-* is also prefixed in its full form (*multiangular, multiovular* etc.).

3. 36. neo- /ˈniːo/

has been a prf with English words since about 1850 and is now in frequent use with learned and scientific words. It is a revival of OGr *neo-* 'new', occurring in cbs such as *neógamos* 'newly married', *neoglyphḗs* 'newly carved' etc.

In English it forms learned words of the type N e o p l a t o n i s m 'new platonism', the radical denoting a system or its follower, also a language or the like. Such cbs are possible ad libitum, exs are *neo-Anglican, -Pythagorean, -materialist, -protectionist, -Catholic, -Calvinist,* and their corresponding *-isms* etc. etc.

In geological terms *neo-* implies opposition to *palæo-* and suggests a recent or more recent period, as in *neolithic, neo-cambrian, neo-volcanic, neo-silurian* etc.

Neo- is also used with names of various things with the general meaning 'recent', as *neocyanite* 'a recently discovered mineral', *neonatal* 'relating to a new-born child' etc. (see OED for more instances).

The prf has a middle stress while the main stress is on the radical. In trisyllabics the stress is, as usual, on the prf (*neotype, neodox*). There is no elision, except before *o* (*neontologist, neontological*).

3. 37. 1.   non- /nɒn/

The ultimate origin of this prf is to be sought in Law Latin. Roman Law knows the following types of negated words: 1) the personal noun type n o n - c r e d i t o r, occurring in words such as *non-debitor, -dominus, -filius, -procurator, -meretrix* a.o., 2) the weak abstract noun type n o n - i s s u e (occurring only in the ablative), found in words such as *non-mandatu, -vi, -voluntate,* 3) adjectival type n o n - a l i e n u s, as found in *non-aequus, -alius, -bonus, -ambiguus, -capitalis, -necessarius* a.o., 4) the verbal type n o n - d u b i t a r e, occurring chiefly in the nominal forms, i.e. the present ptc and the gerund: *non-cernendo, -contradicendo, -dubitans* (see Vocabularium Iurisprudentiae Romanae, ed. Felix Lesser, Berlin 1914, tom. 4, fasc. 1, s.v. *non-*).

3. 37. 2.   We find the same types in Old French. But type 1) which is the

strongest in Latin, appears very weak whilst type 2), in combination with the deverbal sbs of type 4) has grown very strong. We find such words as *non-foi, -purté, -créance, -obstance, -puissance, -sachance* a.o. Of type 3) we find *non-droiturier, -juste, -pareil,* and ptcs of type 4) such as *non-divis, -poant, -puissant* a.o. As the language of jurisprudence in England was Law French, *non-*words were used in England as well as in France. The first words occurring in English are, indeed, Law terms, orig. only sbs. From the 14th c. are recorded *non-age, non-power, non-payment, non-residence, non-suit,* from the 15th c. *non-ability, non-appearance, non-claim,* from the 16th c. *non-feasance, nonperformance, non-resident, non-user, non-tenure.* In the 17th c., the range of *non-*words became larger. *Non-* was extended to adjs and ptcs, chiefly prt ptcs. Present ptcs, except latinizing ones, have always been rare. The new types are *non-harmonious, non-graduated, non-preaching, non-communicant.* The close of the 16th c. is a turning-point from another point of view also. New coinings are no longer Law terms, but words belonging to philosophy, religion and political history. Words which have gained a wider currency are *nonobedience, non-communicant, non-necessity, non-proficiency, non-subscriber* (end of the 16th c.), *non-member, non-natural, non-resistance, non-existence, non-existent, non-entity, non-elect, non-juror, non-juring, non-jurant, noncollegiate, non-compounder, non-conformist, non-conformity, non-descript* (17th c.), *non-resistant, non-importation, non-commissioned, non-content, non-effective,*

non-essential (18th c.), *non-moral, non-substantial, non-committal, non-inter-course, non-rejoinder, non-regulation, non-contradiction, non-interference, non-intervention, non-intrusion, non-combatant, non-Euclidan* (19th c.), *non-belligerence, non-belligerent* (World War II).

3. 37. 3.   With the development of science, *non-* has formed words such as *non-conductor* (1759), *non-condensing, non-metallic, non-metal, noncontagion* (19th c.).

Non- may be attached to preadjunctal sbs, as in *non-Gospel phrases* 1654, *non-Papist Merchant Strangers* 1687, *non-jury case, non-society workman, non-church people, non-party character, non-tax revenue* (19th c.).

Since the 19th c. *non-* words have become very frequent. *Non-* can today be prefixed to almost any adj. The majority are parasynthetic or participial adjs. Examples are *non-active, non-breakable, non-competent, non-defensive, non-efficient, non-fiscal, non-gaseous, non-heathen | non-analysed, non-inter-rupted, non-irritating* etc. etc. Less frequent are impersonal deverbal sbs, as *non-adherence, non-admission, non-combustion, non-conviction, non-demand, non-exercise*, and personal sbs, as *non-abstainer, non-believer, non-parishioner, non-sympathizer, non-dealer, non-producer, non-householder, non-creditor, non-depositor, non-heritor*.

3. 37. 4.   *Non-* is not used with vbs. The OED has the unusual cbs *to non-act* and *to non-licentiate* as nonce-words from the 17th c. Ptcs, chiefly second ptcs, have been in use since the 17th c. Among the earliest examples are *non-preach-ing* 1622, *non-interrupted* 1661, *non-incarnated* 1671, *non-graduated* 1693. At one time (15th to 17th c.) *non-* was frequently prefixed to the vs. This use is extinct today.

From this century have arisen coinages like *non-stop flight, non-stop train, non-skid tire, non-slip soles, non-crush fabrics, non-drip pouring lip*, all commercial jargon.

3. 38.   pan- /pæn/

conveys the meaning 'all, comprising or affecting all'. It is ultimately the OGr prf *pan-*, chiefly used with adjs of the type p a n a r m ó n i o s 'allfitting, panharmonic' or p a n a g a t h ó s 'entirely good'. It was less in use with deverbal and deadjectival sbs, but it is these that Neo-Latin coined freely, and from about 1600 on we find English scholarly cbs such as *pansophy, panorganon, panopticon, pangrammatist, panorama, pantechnicon, pandemonium* (Milton), *panclastite* (an explosive) | *pandemic* (ext. fr. OGr *pandemos, -ios*), *panchro-matic, panerotic, panneurotic*.

In many terms of philosophy *pan-* implies the idea 'universe', as in *pan-theism, pantheist, panlogism, pansophism, panentheism, panpsychism* etc.

The prf is in general use with national names. In Classical Greek there was only the word *panathḗnaia* 'the panathenaean festival', later Greek formed *paniónios, panellḗnios, panaitōlikós* which passed into Latin. We find *panaeto-licus* in Livy and *panionius* in Pliny. Neo-Latin coined *pan-anglicus* (q. OED s. v. *pan-Anglican*) and probably others. The earliest English words appear to be *panionian* 1830 and *panhellenic* 1847 (prob. consequent on the Greek war

of independence 1821/29). The next political term, an outspoken slogan, is *panslavism* 1850 (originating, as it seems, in Germany; the English word is first quoted as *panslavismus* in 1846), *panslavist* 1850 and *panslavonian* 1854 followed. Other terms have been coined subsequently, all with the meaning 'comprising all . . .', as *pan-American, pan-African, pan-Anglican, pan-British, pan-German, pan-European, pan-Islamic* with the corresponding words in *-ism, -ist.* This group is coined on a native basis of coining, whereas the preceding one is formed on a NL basis, the prf being attached to Greek stems only.

3.39. para- /'pærə/

is the OGr prf *para-* as found in numerous OGr words (sbs, vbs, adjs). English has only nominal derivatives. With a few exceptions they date from the 19th and are chiefly terms of biology and natural history, all coined on a NL basis.

On the OGr type paráthyros 'situated beside the door' are formed *parabasal, paracentral, parachordal, paragastric, paramastoid, parasternal, parathyroid, paravesical, paraxial, parumbilical.*

OGr *para-* in cbs with sbs had the meaning 'by-, not main' (the exact parallel of E *by-*), as in *parathlon* 'secondary combat'. On this basis we have *paraplasm, parablast, paracyst, paragaster, paramorph* and derivative adjs like *paraphysical, parasyphilitic, parabranchia, paranucleus* etc.

In chemical terms *para-* has the sense 'occuring with, produced along with', prefixed to names of substances as *parabenzene, parachloralide, paracyanogen, paraldehyde.*

3.40. per- /pɜ(r)/

is only used in chemical phraseology. With the beginning of the 19th c. words are coined on the following types: p e r c h l o r i d e 'chloride containing a relatively high proportion of chlorine', p e r c h l o r a t e 'salt of perchloric acid', p e r c h l o r i c 'pertaining to or designating the highest oxygen acid of chlorine'. Examples are *periodide, peroxide, percarbide, peracid | perborate, periodate, permanganate | perboric, periodic, permanganic.*

This use goes back to L *per-* used as an intensifying prf with adjs such as *permagnus, perlaetus, perimbecillus* etc. 'very, exceedingly . . .'.

3.41. peri- /'pɛrɪ/

is a prf with terms of anatomy, medicine, and natural history, formed on a NL basis. We have parasynthetic adjs, ultimately formed on the OGr type p e r í g e i o s 'surrounding . . .', as *peribranchial, peribronchial, pericellular, perichordal, periotic, peristomatic* etc. The group goes back to the 16th c.

There are many parasynthetic sbs in *-itis* of the type p e r i c a r d i t i s 'inflammation of the part surrounding . . .', as *perichondritis, perinephritis, perineuritis, periostitis | periarteritis, periarthritis* etc.

There is no elision of the vowel in OGr, so the prf always has its full form in NL and English. The main stress is on the radical.

3.42.   poly- /'pɒli/

` is the counterpart of *multi-* (which is prefixed to Latin stems) in scientific
words with a Greek root. The ultimate OGr types are polýpous 'many-
footed' resp., as a bahuvrihi sb, 'one who has many feet' and polypodía
'state of having many feet'. AL borrowed many words from Greek (many in
Pliny). NL has made use of the prf, esp. in the phraseology of natural history, and
English follows this line. Many of the English words have an actual OGr pattern,
which need not, however, have been the pattern for the English coinage.

Examples of adjs are *polyandrous, polyatomic, polychromatic, polychromic*.
The prf has various uses in chemistry for which I refer the reader to the OED.

There are words with *poly-* from a Latin stem such as *polyvalent, poly-
angular, polynucleate, polydigital*, even a few with *poly-* prefixed to a native
root, such as *polysoil farm* (1778), *polypage plate* (printing term), *polygrooved
rifle*. In chemistry, the prf is used with words of Greek and Latin origin alike.

3.43.1.   post- /post/

with the basic meaning 'after', ultimately represents AL *post-*, a verbal and
nominal prf. The AL types were postponere 'put after, put off', post-
meridianus 'taking place after mid-day'; the type postcommunio 'the
part after communion (in mass)' is ML only.

The type *postponere* has been imitated in a few words such as *post-date* (the
only common word), *-exist, -fix | -determined, -prophesied | -jacent, -commu-
nicant | -position, -existence, -fruition*.

A few technical terms have been coined in which the relation is that of
adjunct/primary, as *post-entry* 'subsequent entry', *post-warrant*. But *post-*
has not acquired the independent adjunctal character of *ante-* (nor has *pre-*),
as the stress pattern ─⸚ shows. The OED (s.v. *post-* A. 1. b.) has a good number
of sbs formed as adjunct/primary groups with the meaning 'subsequent . . .', all
having the main stress on the radical. The stress pattern regularly to be expec-
ted is found in *póst-dàte* and the before-mentioned *póst-èntry* and *póstwàrrant*.

An adjunct/primary relation also underlies terms belonging to anatomy, of
the type post-abdomen 'posterior part of the abdomen', as *post-cava,
-clavicle, -furca, -nares* a.o., likewise stressed on the radical.

3.43.2.   The only type that has really become productive in English wf is
type *postmeridianus* (which in CL is still weak, but grows in subsequent
periods). Though we have coinages from the 17th c. on, as *postmeridian* 1626,
post-diluvian (after *antediluvian* 1646) 1680, *post-connubial* 1780, the vast
majority date from the 19th c., as *post-biblical, -pagan, -baptismal, -resurrectio-
nal, -classical, -Roman, -natal, -nuptial, -graduate, -prandial | -cretacean,
-diluvial, -glacial, -tertiary | -Adamic, -Cartesian, -Darwinian, -Homeric,
-Kantian, -Elizabethan* and other derivatives from proper names.

3.43.3.   Developing at about the same time as the corresponding types *pre-*
and *ante-war years* (second half of the 19th c.), formed after the prototype
anti-court party, we have the type post-war years with cbs such as *post-
Pliocene period* (1847), *post-election period, post-Easter time, post-Reformation,
post-Restoration* etc. *period*. The idea is always that of 'time following . . .'.

3. 43. 4.   In medical terms of the 19th c. and later, *post-* indicates conditions or symptoms following an attack of . . ., as in *post-diphtheritic, -epileptic, -influenzal, -paralytic, -paroxismal, -scarlatinal* etc. The same meaning is conveyed by *meta-* (see there).

3. 43. 5.   In the nomenclature of anatomy and zoology are used adjs of the type p o s t - a b d o m i n a l 'situated behind, at the back of . . .', as *post-frontal, -oral, -ocular, -temporal, -anal, -cerebral, -orbital, -tympanic, -scapular* etc. There is again a parallel *meta-* type.

3. 44. 1.   **pre-** /pri/

is a nominal and verbal prf conveying the idea 'before' in various locative and temporal shades. It is ultimately L *prae-* which was spelled *pre-* in ML and OF.

In Ancient Latin, the verbal type *prae-dicere* 'tell beforehand' was very strong, and its productivity increased even more in later periods. French early imitated the pattern, and under the combined influence of Latin and French, *pre-* verbs originated and grew in English. Among the earliest words found are *predestine* 1380, *prefigure* 1450, both ecclesiastical terms, and *presuppose* 1426, all loans from French. From the 16th c. on, English derivatives are formed freely, but I shall give only a few of the more common verbs. The following are first recorded in the 16th c.: p r e c o n c e i v e, *precontract, predefine, preelect, preexist, prejudge, premeditate*. Among the numerous coinages of the 17th c. we find such verbs as *preadmit, predetermine, predigest, predispose, preengage, preestablish, prepossess*. From the 18th c. are recorded *preassure, preconcert, precontrive*, from the 19th c. *preannounce, prearrange, precalculate, predesignate, prepay*.

The prefix is chiefly attached to verbs of Latin origin. Cbs with native words are less frequent, except for recent technical coinages such as *prebake, preboil*, p r e c o o k, *precool, preheat, preshrink*.

3. 44. 2.   Latin action sbs of the type *praedictio* were adopted alongside of their respective verbs, other deverbal sbs were formed from the English verb, either on a native (*pre-engagement*) or on a Latin morphologic basis (*pre-conception*). A sb like *preconception* is basically a derivative from *preconceive* with the sense 'act of preconceiving'. However, as *conception* is an independent word, *preconception* can be analysed as an adjunct/primary group, 'previous, anticipatory conception'. We accordingly have coinages of either semantic pattern, often with one and the same word. Analysis on an adjunct/primary basis may even lead to an occasional combination with a sb that is not a deverbal derivative, as *precondition* 1825 (*prehistory* 1871 is a derivative from the adj *prehistoric* 1851). In principle, however, the group has preserved its deverbal character. An early derivative is *pre-contract* 1483; a few others are recorded from the second half of the 16th century, as *preequipment, preapprehension, preconsideration*, and the now rare word *preordination*. The 17th century is represented by such words as *preadmonition, preapprehension, preassurance, preconception, predicision, predesignation, predisposition, preelection, preengagement, preexistence, preoption*. From the 18th century date

prearrangement, preattachment, pretaxation. More recent are *preperception* 1871 and *preadmission* 1887.

Derivation from native roots is uncommon. Combinations such as *preboding, preknowledge, prename, preshadow, preshow, pretoken,* recorded in OED, are not characteristic of general usage.

With the exception of disyllabic words like *preprint* 1889 and *preview* 1882 which are forestressed, deverbal sbs have the main stress on the nominal basis.

3. 44. 3. Neo-Latin has the type pre-abdomen 'anterior part of the abdomen' which is parallel to the type *post-abdomen* (discussed 3. 43. 1.). English combinations are chiefly used in their Latin form. They are terms of anatomy and zoology, as *pregeniculum, preomosternum, prerima, prescutum / prepeduncle.* The pattern dates from the 19th century.

3. 44. 4. The parasynthetic adj type pre-natal dates from the 19th c. There is no pattern for it either in Ancient or Medieval Latin. Neo-Latin coined the sb *prae-Adamita* which passed into English and gave rise to *pre-Adamitical* 1716. The rise of the 19th c. type was not, however, occasioned by this isolated coining, but probably came existence as parallel to type *ante-diluvian* which is much older. The earliest recorded word is *pre-diluvian* 1804. Later are *pre-prandial, pre-natal, pre-Christian, pre-millennian, -human, -historic, -glacial, -Roman / -Alfredian, -Baconian, -Chaucerian, -Darwinian, -Messianic, Raphaelite / -Cambrian, -Laurentian, -Silurian.*

The implication is sometimes 'previous (prior) to the fact, knowledge, use, existence or the like of . . .', as in *pre-bacillary, -bromidic, -anaesthetic, -connubial, -dynastic* etc., or 'preparatory or prerequisite to . . .' as in the educational terms *pre-medical, -professional, -vocational (-college, -school).*

With native adjs the type is not in use. A word like *preearthly* 1848 is exceptional.

In medical terms (correlative with *post-*), *pre-* conveys the meaning 'previous to the stage of the disease of . . .', as in *pre-albuminuric, -ascitic, -cancerous, -diastolic, -phthisical, -paroxysmal* etc.

3. 44. 5. The type pre-war years (parallel to *ante-, post-* and *inter-* cbs) develops in the second half of the 19th c. Examples are *pre-railroad world, pre-advertisement era, pre-Easter season, pre-election pledges, pre-development stage, pre-disease warning, pre-school benefits.*

3. 44. 6. The type *pre-natal* has its locative counterpart in the type pre-bronchial 'situated before or in front of . . .'. Coinages of this type belong to the phraseology of anatomy and zoology and are 19th c. or later. Examples are *pre-axial, -coracoid, -dorsal, -frontal, -maxillary, -molar, -ocular, -orbital, -temporal, -vertebral.*

3. 44. 7. AL had a strong adjectival type *praedurus* 'exceedingly . . .'. Scholarly writers have tried to introduce the type into English with words such as *pre-pleasing* 1530, *pre-Luciferian* 1630, *pre-regular* 1647, *pre-pious* 1657. But this is as far as the type goes.

3.45. preter- /ˈpriːtə/

is ultimately L *praeter*, in ML spelled *preter* 'past, beyond'. In AL *praeter-* was a verbal prf only (*praeter-ago, -curro, -duco* etc.). After the pattern of other parasynthetic adjs (*ultramundanus, extranaturalis* etc.) ML formed the type *preternaturalis*. From the 17th c. on we have Ec, beginning with adapted pre ter-natural 1600. The meaning of these adjs is 'beyond, outside, more than (the range, compass) of . . .'. Most of the existing cbs were coined in the 17th c., as *preter-essential, -intentional, -native, -political, -scriptural, -regular, -notorious, -seasonable*. A few words were added in the 19th c., as *preter-human, -sensual, -nuptial* 'extra-marital'.

The type has proved weak against the types with *extra-, ultra-, trans-*. It has not been used in scientific nomenclature.

3.46. pro- /prо/ (type pro consul)

was used in Latin with designations of office-holders, as *proconsul, propraetor, proflamen, progubernator*, also with a few other words like *pronomen* and *protutela*. The meaning is 'substitute of . . .'. In Modern Latin, words such as *prorector, proproctor* are terms used in universities and similar institutions. In English we have adaptation and imitation of Latin usage in words such as obs. *prorex* 1586, *prorector, -proctor, -legate, -tetrarch, -vice-chancellor* (17th c.), *pro-regent* 1798, *pro-guardian, -Provost, -Grand Master* (19th c.), a few rare impersonal sbs as *pro-tribune* 1645, *pro-cathedral* 1668, *pro-reality* (19th c.), and adjs such as *pro-substantival* 1794, *pro-ethical* (19th c.).

3.47. pro- / pro / (type pro-amnion)

This is a 19th c. scientific prf equivalent to *fore-, pre-, ante-*, sometimes *proto-*. Its use is almost restricted to sbs and adjs of natural history. It is ultimately OGr *pro-*. Already in LL we find many words such as *proboscis, proplasma, propigneon* 'praefurnium', *proastium, proscaenium, procomion* which were analysable as prf-formations. But PE usage is not a continuation of these, but a NL revival of the various types in the service of scientific nomenclature. The types are pro-ethnic 'previous to, preceding . . .', as in *procosmial, -baptismal*. The type is weak. Its counterpart is the type pro-otic 'situated in front of the ear' which forms anatomical and zoological adjs: *procephalic, -chordal, -cnemial*.

The type pro-amnion with the implication 'primitive amnion in the embryonic stage of some animals', based on OGr words such as *proarchḗ* 'original beginning', *prodoméus* 'first builder', we have in words like *promeristem, -peristome, -angiosperm, -cambium, -thallium*.

The type pro-glottis 'front part of . . .' (the type word is OGr) has formed sbs belonging to anatomy and zoology, as *pro-osteon, -nephron, -notum, -scutum, -stomium, -thorax*.

These combinations date from the 19th c. The basis of coining is Neo-Latin, and cbs are stressed accordingly, i.e. on the radical. The pronunciation also is NL, the OGr *o* was a short *o*.

3. 48.   pro- /proʊ/ (type pro-British)

as in pro-British 'in favor of . . .' is the opposite of *anti-* and has probably arisen as such. The OED supposes that it originated in sb *pro* 'one who votes in favor of a proposal'. This origin is impossible as the word-order type *pro-British* = *friend-Briton* is contrary to the principles of E wf.

The first instances occur shortly before 1830: *pro-popery Ministry* 1829, *pro-Catholics* 1831, *pro-transsubstantiation passage* 1839, *pro-educational* and *anti-slavery parties* 1839. There are many cbs in connection with the problem of slavery: *pro-Slavery action* 1843, *pro-Slavery-ism* 1843, *pro-Slavers* 1858, *pro-Slave* 1856, *pro-negro party* 1892. In the last years of the 19th c. *pro-* begins to attain the range of frequency with which it is today used in political jargon. Examples are *pro-American, -English, -German, -Russian* where *pro-* is prefixed to national names.

Pro- was originally and has always chiefly been prefixed to attributive adjs and preadjunctal sbs (as in *pro-British policy, pro-Boer movement*). These cbs can also be used predicatively. A few are used as sbs, as *a pro-Boer*. From cbs such as *pro-Slave policy* developed others in which the last member is a sf, so we get parasynthetic sbs like *pro-Slaver, pro-Boarder, pro-liquorite, pro-flogger* (with a verbal stem) / *pro-clericalism, pro-Boerism*.

The use of the prf in other European languages (French, German) is probably influenced by English usage.

3. 49. 1.   proto- /'proʊtə/

is a prf with learned and scientific words. It is ultimately OGr *prōto-*, a chiefly nominal prf with the meaning 'first, chief'. OGr words with a religious tinge passed into Late Latin, as *protomysta* 'high priest of ancient religious mysteries', *prototypos, protoplastus* (= 'Adam'). Ecclesiastical Latin formed words also from Latin stems as *proto-lapsus* 'first-fallen' (= Adam), *protosedeo* 'sit at the top' (Tertull.). Non-ecclesiastical words are *protonotarius* 'principal notary in the Byzantine court' LL, *protoforestarius* 'chief forester' ML, *protophylarchus* 'head of a tribe in Utopia' MoL. It is chiefly this substantival type which gives rise to English formations.

3. 49. 2.

From the close of the 16th c. on, the prf is productive in English. The types are proto-type 'first, primary, original type' and proto-traitor 'chief, principal traitor'. Examples are *protomartyr* LME (= OF = ML = OGr), *proto-apostate, -bishop, -chronicler, -god, -heresiarch, -historian, -parent, -protestant* / *proto-ideal, -plot, -pattern* and a few others, all of the type *proto-type*. The words are no longer in use. On the type *proto-traitor* are formed *proto-notary* 1447 (LL), *proto-architect, -chemist, -devil, -groom, -magnate, -rebel, -abbacy, -justiciaryship*, all uncommon today (cf. *arch-*).

3. 49. 3.

In the second half of the 19th c. *proto-* came to be used with adjs denoting languages, races, tribes, styles of architecture etc. of the type proto-Arabic 'primitive Arabic', as *proto-Babylonian, -Caucasian, -Celtic, -Doric, -Egyptian, -Greek, -Ionic, -Phoenician* / *proto-lithic* etc. These words are not much used, cbs with primitives for the first-word being usually preferred.

3.49.4. In 19th c. terms of biology and zoology (many of them appear in NL form) designate an (actual or hypothetical) primitive type, organism or the like, as *protamnion, protoconch, proto-organism, protonema* (*nema* 'thread'), *protodome, protoplasm, protoprism, protospore, protosomite, protohippus, protococcus.*

3.49.5. In chemistry *proto-* denotes "the first or lowest of a series, or one having (or supposed to have) the smallest relative amount of the element or radical indicated in the name to which it is prefixed, as in *protoxide*", also "a substance that is held to be the parent of the substance to the name of which it is prefixed" (Webster's Collegiate Dictionary).

3.49.6. The scholarly words following the types *prototype, prototraitor,* and *proto-Arabic* are coined on a native basis, i.e. *proto-* is invariably prefixed to an English scholarly word. The words belonging to zoology, biology and chemistry are usually coined on a NL basis, i.e. they follow the linguistic laws of OGr according to which they were also formed in NL. We therefore have *prot-* before a vowel: *protamnion, protastacus, protamoeba* / *protoxide*. Exceptions are *proto-organism, proto-actinium.*

3.50.1. **pseudo-** /'sjudo/

ultimately represents OGr *pseudo-,* a combining form from stem *pseud-* (as in *pseudos* 'falsehood, lie'). *Pseudo-* (before vowels *pseud-*) was exceedingly frequent in Late Greek wf. Several words passed into Late Latin, esp. terms of natural history (*pseudo-sphēx* 'false wasp', *pseudosmaragdus* 'false emerald') and words from the vocabulary of the Church, as *pseudochristus* (Itala), *pseudopropheta* (Itala), *pseudapostolus, pseudochristianus,* and *pseudo-* became very productive in Latin (hence in French, German and other languages). Beginning with Wyclif we find *pseudo* in English, and it is proof of the frequency with which *pseudo-* was used in Latin and French at that time that it was apprehended as a full word in English and so used for a long time, chiefly as an adj, but also as sb and adv. In Wyclif we find *pseudo-christ, pseudoprophet, pseudo-frere* (= *friar*), *pseudo-clerk, pseudo-priest*. These words remain within the sphere of religion, and for about two centuries no other coinages are recorded. After 1600 *pseudo-* cbs grow common. "At least 20 examples appear before 1700, and 20 more before 1800. By 1800 *pseudo-* had become a living element prefixable at will" (OED s. v. *pseudo-*).

3.50.2. Type **pseudo-Christ**. With sbs, *pseudo-* conveys the meaning 'spurious, false'. Up to 1800 this was the prevalent type. Exs are practically ad libitum, such as *pseudo-catholic* 1605, *pseudo-Moses* 1613, *pseudo-politician* 1628 (the earliest quotations in the OED), *pseudo-prophetess, -zealot, -ascetic, -chronologist, -enthusiast, -patriot, -patron, -evangelist* (all before 1800), *-bard, -legislator, -gentleman, -philanthropist, -education, -philosophy, -bible* etc. etc.

3.50.3. The type **pseudo-archaic** has chiefly developed since 1800. Examples are *pseudo-catholic, -christian, -classic, -Gothic, -religious, -romantic, -dramatic* etc. etc. The implication is 'falsely . . . .'.

3. 50. 4. The cbs of the preceding types are coined on a native basis, i.e. there is no elision before a vowel. Things are different with terms of scientific nomenclature which follow the rules of OGr and NL, though here also we observe a tendency to prefix *pseudo-* unchanged. Cbs of this group have been coined since the 19th c. The types are the same as those treated above. A few exs are *pseudaesthesia, pseudambulacrum, pseudarthrosis, pseudaxis, pseudobranch, pseudocyst, pseudoclerosis* etc. etc. | *pseudo-bulbous, pseudo-ceratophorous, pseudocorneous, pseudo-parasitic* etc. etc. With these words *pseudo-* denotes (deceptive) resemblance.

The full form of the prf (i.e. we have word-coining on a native basis) appears in *pseudo-acacia, -alcaloid, -angle* (Geom.), *-articulation* (Zool.), *-urate, -uric, -erysipelas* and others.

3. 51. 1. re- /ri/

is a prf chiefly tacked on to transitive vbs, it conveys the meaning '. . . anew, again', occasionally ' . . . back'. Its use as a prf is probably due more to French than to Latin though the OED has it rather the other way round.

In AL we find *re-* with various meanings of 'back, again', but the prevalent sense it acquired in LL is 'a second time, again', as in *refigurare, reformare, regenerare, recoquere, rebaptizare, reaedificare* a.o. The sense of repetition is the strongest one in OF also and the only one the French prf has today. From about 1200 on we find *re-* words in English, up to 1500 chiefly loans from French. We have almost no Latin loans at all before the middle of the 16th c. whereas English new formations occur from the 15th c. on. This is not in favor of the theory of the OED according to which the prf is due to loans from Latin. Examples of words English borrowed from French are *recoil, rebel, receit, release, remue, restore, record, relieve, repent, reward, restitue, rehearse* from which, however, no prf could spring as the vbs had no unprefixed counterparts to go with. But there were others, as *revest, redress, recomfort, reform, reseize, refigure, reedify, recover, recharge, repass* which all admitted of the analysis '. . . again'.

3. 51. 2. By 1450 *re-* had come to be felt as a prf, as we have *re-enter* 1442, *re-establish* 1483, *re-assemble* 1494 from F *rentrer, restablir, rassembler*. *Re-establish* was coined alongside of older *restablish* 1413, a fact that is significant as to the prefixal character of *re-*. And we have *reascend* 1450, *rebaptize* 1460, *reassume* 1494 for which no French pattern appears to be recorded, with the meaning required here, at least. *Rebaptize* may, however, be due to *rebaptizare* LL, *rebuild* 1590 was probably formed after *reedify, reflow* after *refluere* L. Other Ecs follow, derived from French, Latin and native bases. 16th c. are *re-assure, re-bellow* (= L *reboare* 'bellow back'), *re-born, re-consider, re-convey, re-echo, re-enforce, re-examine, re-found, re-gain, re-greet, re-instate, re-kindle, re-live, re-plant, re-print, re-tread*. From the 17th c. are recorded *re-inforce, re-act, re-admit, re-adjust, re-appear, re-assert, re-attach* (Law term), *re-boil, recast, re-compose, re-convert, re-distribute, re-draw, re-export, re-fill, re-fit, reinvest, re-ordain, re-organize, re-produce, re-publish, re-set, re-touch*. The 18th

c. has considerably fewer coinages: *re-absorb, re-capture, re-cede, re-construct, re-count, re-dress, re-load, re-open.*

The 19th c. coined *re-arm, re-attach, re-birth, re-bite, re-book, re-district* U.S., *re-hash, re-line, re-play, re-awake(n).*

3. 51. 3.   The prf is only used with transitive vbs, i.e. *re-* does not express mere repetition of an action, it connotes the idea of repetition only with actions connected with an object. And it is with a view to the result of the action performed on an object that *re-* is used. The result of the action is 1) either understood to be imperfect or unattained, and *re-* then denotes repetition with a view to changing or improving the previous inadequate result (as in *redirect* (a letter), *rearrange, respell, rewrite*). Cp. also *rewrite* as an American term of journalism with the meaning 'put (the reporter's material) into form for publication'. Change, though not improvement, is also implied in the word *resettle* for G *umsiedeln* (I first came across this shade of meaning in 1947), whereas the likewise recent politically tinged word *re-education* does imply change for the better. 2) The result of the action resp. the former state has come undone, and then *re-* reverses the reversal, restores the previous result or state. Examples for this meaning are *repossess, reimburse, recapture, reinstate, reinvest, reconvert, resole.*

The agent of the *re-* action may or may not be the same as that of the original action. In the latter case, the meaning is sometimes '. . . back', as in *reconvey, re-export, repurchase* a.o.

3. 51. 4.   From the 19th c. and esp. in recent technical usage we have *re-* prefixed to desubstantival verbs with the meaning 'furnish with new . . .'. Among the earliest words are *refuel* 1811, *rehouse* 1820, from this century are *re-wire* 1903, *re-tread* 1908 'furnish (a tire) with a new tread'. Other cbs are *re-arm, re-coat, re-coal, re-color, re-engine, re-face, re-ink, re-label, re-mast, resurface, re-paper, re-stock, re-type.*

3. 51. 5.   19th c. are also deadjectival vbs of the type *re-English* 'turn into English again'. Most vbs are, however, coined on the type *re-Americanize* 'turn into . . . again', as *re-brutalize, re-conventionalize, re-fertilize, re-latinize, re-hellenize.*

Almost any transitive vb can today be prefixed by *re-* (see list in OED s.v. *re-*), but the prf is rare with intransitive or intransitively used vbs. Most of the vbs that occur are of Romance origin (in French *re-, ré-* is prefixed to intransitive as well as transitive vbs), as *re-enter, re-ascend, re-descend, re-embark, re-emerge, re-charge* (in battle), *re-sound, re-dress, re-marry, re-appear.* But there are no **recome, *relie, *resmoke,* and words like *rebecome, remeet, respeak, rego, re-arise* have not gained general currency. *Reawake(n)* 1831 is common, though.

3. 51. 6.   The prf is, as a matter of course, found with deverbal sbs. A few instances are *re-arrangement, re-appointment, re-delivery, re-election* / *remake* (not in OED or Spl.), *retake, rerun, recount, refill, resale, rehash, refit.* These sbs are partly mere nouns of action, partly coinings on the basis of an adjunct/ primary group, analysable as 'new or fresh . . .' (so in *recount, refill* and the Law terms below). The type has, however, a certain degree of independence

insofar as such sbs are coined regardless whether a vb is actually in existence. There is no vb going with *re-carriage* 'conveyance back'. *Rebirth* was coined after the pattern of *renaissance, revival* and therefore originally stressed on the radical, whilst the pronunciation with stress on the prf is also heard now (though the OED does not mention it), and is regular with monosyllabic bases.

A number of sbs are legal terms. This use is based on French resp. Law French. Ultimately they are all deverbal sbs though not always from the viewpoint of English wf. Examples are *resummons* 'a second or renewed summons' (now only a historical term) 1495, *rechange* in obs. sense 're-exchange on a bill' 1487, *repleader* 'second pleader' 1607, *redraft* 1682, *retrial, redemise* 1797, *reinsurance* 1799.

3. 51. 7.   The pronunciation of the prf in the types discussed is [ri]. In vbs, the main stress is on the radical, but the prf has a heavy middle stress. With deverbal derivatives the stress pattern is originally the same, but with disyllabic sbs there is now a stronger tendency to stress the prf: *a réfund, réturn* (of tax surplus), *a réfit, a réfill, a rédraft, a récount* etc., esp. when the cbs are analysable in the sense of 'new . . .'.

As the pronunciation [ri] is derivatively relevant, deviations from it are negatively characteristic: we find the pronunciation [rɪ] with words which are loans, chiefly from French. *Replace* 1595 is F *replacer* (not *re-* plus *place*, as OED says), *repay* 1530 is F *repayer, regain* 1548 is F *regagner, recurve* 1597 'curve back' is L *recurvare. Renew* is OF *renover*, refashioned after *new, rebound* 'spring back' is OF *rebondir, recoil* is adapted from OF *reculer*. A few words have a non-French root, as *remind* 1645 which is *re-* plus *mind* 'remind', but influenced by *remember. Recall* 1575 is coined after *reclaim* (= OF *reclamer*). On the other hand, there are a number of original loans which are now apprehended as Ec and pronounced [ri] accordingly, as *re-enter, refigure, recharge, re-establish, recommence* a.o.

For the sake of contrast I give a few spelling doublets, the first being the English prf coining, the second a loan word (with *re-* pronounced [rɪ], sometimes also [rɛ]): *re-act/react, re-cede/recede, re-count/recount, re-cover/recover, re-create/ recreate* 'refresh', *re-form/reform, re-lease/release, re-sound/resound, re-trace/re-trace, re-view/review, re-store/restore*.

3. 52.   retro- /'ritro/

is a scientific prf, forming 19th c. words with the meaning 'backwards, back, situated behind'. It is attached to Latin stems (though some of these are ultimately Greek).

In AL we find *retro-* in Quintilian, Livy, Seneca, Pliny and later writers with vbs of the 'move' class such as *retro-ago, -eo, -cedo, -gradior, verto* and their derivatives. Medieval Latin adds a few words. Most of them occur in English as adapted Latin: *retrograde* adj (close of the 14th c.), *retrograde* vb, *retro-gradation, -cedent* (16th c.), *retro-active, -cession, -gression, -spection, -cede, -vert* (17th c.), *retro-flex, -act, -action, -version* (18th c.), *retro-gress, -gressive, -flexion* (19th c.).

The 19th c. coined many scientific words such as *retro-cognition, -migration, -reception, -susception, -transference, -vision, -copulation, -vaccination, -cognitive,*

-operative, -fracted a.o., also a few others, as *retrodate* 'date backwards', *retro-seer, retro-coupling* (bee boxes) which are, however, unusual.

In pathology and anatomy *retro-* forms parasynthetic adjs of the type retro-ocular 'situated behind the eyes', thus partly competing with *meta-*. Examples are *retro-mastoid, -buccal, -frontal, -renal, -maxillary, -sternal, -tarsal, -uterine.*

With the words coined in the 19th c. on a NL basis the prevalent pronunciation is [ritro]. The older set of adapted Latin words have often [rɛtro], but under the influence of derivative *retro-*, the pron. [ritro] is growing in frequency.

English new formations have the main stress on the radical, the prf having a heavy middle stress. The adapted Latin words are, on principle, non-composite cbs from the viewpoint of English wf and are stressed in various ways which we need not discuss in a chapter on wf.

3.53.1. semi- /ˈsɛmɪ/

is ultimately L *semi-* 'half, partly', used as a prf with adjs and sbs. The AL types are *semiacerbus, semi-digitalis, semi-amputatus / semi-bos, semi-hora.* The types, chiefly the adjectival ones, grew considerably in LL and ML. In MoL, *semi-* forms many scholarly and scientific words. In Chaucer's time we find the first *semi-* words in E, chiefly adapted Latin words. The earliest are *semi-cope* 'short cloak' (Ch.), *semi-bousy* 'half boozy, half drunk' c 1400, *semi-god* (tr. L *semideus*) 1417, *semi-cicle* 'a half sicla' (ML *sicla* 'a liquid measure') c 1440.

The 18th and 19th c. contributed terms used in natural history, while mathematical and astronomical words occur as early as the 17th c., a few even in the 16th c. Architectural words are 18th c. and later; words belonging to philosophy and religion are 17th c. Adjectives denoting periodical recurrence, also used as sbs denoting periodicals, belong to the 19th c., as do terms of commerce.

3.53.2. *Semi-* has chiefly been prefixed to Latin stems, cbs with native roots being infrequent (they belong to the 19th c. with the exception of *semigod*). The English types are 1) semi-fluid (adjs of Latin origin), 2) semi-dry, semi-weekly (adjs of native origin), 3) semi-attached, semi-fitting (participial adjs), 4) semi-state affairs (preadjunctal sbs), 5) semi-allegiance, semi-dome, semi-cone (impersonal sbs), 6) semi-barbarian, semi-ape (sbs denoting living beings).

In general usage the prf is found with a few words only. Their character is learned or technical though the words are used by a wider public. Examples are *semi-official, -occasional, -final, -Arian, -Pelagian, -colon*, and the 'periodical' words (see below). The proper domain of *semi-* is the formation of technical terms of all kind: music (*semi-quaver, -breve* etc.), mathematics (*semi-axis, -angle, -base, -difference, -infinite, -sum* etc.), astronomy (*semi-sextile, -quintile, -square* etc.), natural history (*semi-annular, -coronated, -coronet, -fascia, -ring* etc.), religion and philosophy (*semi-Pelagian, -Arian, -Darwinian, -infidel* etc.), building and architecture (*semi-arch, -beam, -column, -shaft, -engaged* etc.), anatomy, chiefly names of muscles, used in NL form (*semi-membranosus,*

-orbicularis etc.), commercial production (*semi-china, -porcelain, -steel* etc.) and other spheres (see OED).

The meaning of *semi-* words is 'half, incomplete, partly . . .'. The exact meaning 'half' is found in musical, astronomical, mathematical and natural history terms, also in words which express measure (for time, space or the like). Otherwise *semi-* conveys the shade of incompleteness, approximateness.

3. 53. 3.   Here are some examples according to the numbering above:

1) *semi-arid, -automatic, -conscious, -cordate, -divine, -elliptical, -formal, -Gothic, -invalid, -liquid, -lanceolate, -mute, -nude, -official, -opaque, -permeable, -rigid, -solid, -transparent* etc. etc.

2) *semi-skilled, -hard, -mild* (said of steel). The type is more in use with adjs denoting periodical recurrence, in which *semi-* implies that the period is halved. The meaning of the cbs is 'twice a . . .', as in *semi-weekly, -daily, -yearly, -monthly*. Also cbs with Latin roots occur, after *semi-annual*, as *semi-centennial, -millenary, -horal, -mensal*.

3) *semi-attached, -civilized, -coagulated, -detached, -developed, -domesticated, -educated, -enclosed, -engaged, -Romanized, -vitrified*. With first ptcs *semi-* is not often combined. Examples are *semi-drying, -fitting, -floating*.

4) The use of *semi-* with preadjunctal sbs is chiefly 19th c. (*semi-vegetable diet* is recorded from 1780), as *semi-state honors, semi-cotton derivation, semi-dress landau, semi-Empire shape, semi-gala carriage, semi-Patriot ministry*.

5) Abstract nouns are *semi-allegiance, -acquaintance, -barbarism, -independence, -intoxication, -loyalty, -monopoly, -narcosis, -obscurity, -paralysis, -starvation*. Concrete nouns are *semi-arc, -arch, -column, -ellipse, -dome, -beam, -shaft, -steel, -china, -porcelain*. Words for geometrical forms derived by bisection are *semi-cone, -cup, -disk, -egg, -hexagon* etc. There are also other mathematical terms implying bisection, as *semi-angle, -base, -circumference, -circumlocution, -quadrangle, -segment* etc.

6) Words denoting living beings are *semi-barbarian, -Christian*, obs. *semi-proselite* 1622 / *semi-ape, -nymph*.

The prf has the main stress in cbs with monosyllabic or disyllabic sbs, as *semi-tone, semi-vowel*. In all other cbs, including adjs used as primaries (*semi-barbarian, semi-weekly* etc.), the main stress is on the radical, while the prf has a heavy middle stress.

3. 54.   step- /stɛp/

is a prf exclusively used in terms of relationship, connoting that the respective degree of affinity is not a natural one but caused by remarriage of a parent. This use is already OE, and the prf has counterparts in all Germanic languages. Examples are *stepfather, stepmother, stepchild, stepson, stepdaughter* (all OE), *stepbrother, stepsister* (1440).

The prf *step-* has the same root as OE *astiepan* 'bereave' and OHG *stiufen* 'bereave'. OE *steopbearn, steopcild* also meant 'orphan'. A stepfather is therefore prob. a father to a bereaved, but the bereavement may extend to one parent only. For various uses of *step-* in the 16th and 17th c. see OED s.v. *step-*.

The prf always has the main stress.

3. 55. 1.   sub- /sʌb/

is a nominal and verbal prf meaning 'under, below'. It represents L *sub-*, a strong verbal and nominal prf already in the classical period.

The first type to be imitated in English was the type su b - editor. Cbs of this type have the meaning 'subordinate . . .'. The type is not used in CL (but Plautus uses *subcustos* 'subwarden'). Late Latin has many new formations such as *submagister, subcurator, subdiaconus, subregulus* etc., and in ML we find many more, as *subprior, sub-bedellus, sub-secretarius, sub-ballivus*. The first English words occuring are loans from OF, as *subdean* 1303 (= OF *soudiakene, subdiacne*) recorded in the forms *sudeakne, sodeken, subdekene, subdecon*; *subprior* 1340, *subdean* 1362 (= OF *souzdeien, soubdean*) recorded in the forms *sodene, sudene, subdene*. These forms as well as the OF originals show vacillation between the popular development of L *subtus* which resulted in *sous, sou* and which is a separate prf in French, and learned influence of L *sub-* words which kept growing in Medieval Latin. In English, the decision has been in favor of Latin usage right from the beginning. *Subtenant* 1445 is an early coinage, other cbs follow in the 16th c. only. They all denote the holder of a position, chiefly an office, as *sub-constable* 1512, *sub-chanter* 1515, orig. 'a precentor's deputy', *subhead* 1588 'one next in rank to the head of a college etc.', *sub-treasurer* 1546, *sub-marshal* 1594. The full growth of the prf developed, however, in the 17th c. From the 17th c. on we find many cbs, such as *sub-almoner, sub-agent, sub-commissioner, sub-chamberlain, sub-delegate, sub-governor, sub-lieutenant, sub-officer, sub-postmaster, sub-prefect, sub-rector, sub-vicar, sub-warden* etc. PE words are all administration and office terms.

A few personal sbs have been coined outside the preceding group, as *sub-customer* 1580, *sub-farmer, sub-antichrist, sub-searcher, sub-fool, sub-patron* (all 17th c.), no longer in use today, and there is the recent coinage *subman* 1921 (as opp. to *superman*).

3. 55. 2.   The type su b - division is the type for non-personal sbs. No words occur in CL, in LL I find *subdivisio* (i.e. as an adjunct/primary group, not as deverbal sb). English adopted the word as *subdivision* 1553 and formed other sbs on the pattern, chiefly words with the basic meaning 'division' and most of them terms of natural history. Examples are *sub-distinction* 1655 H, *sub-committee* 1610, *subsection* 1621, *subdialect* 1643, *subspecies* 1699. Most of the cbs of this type were, however, formed in the 19th c. or later, as *sub-class, sub-family, subgenus, sub-kingdom, sub-variety, suborder, subgroup / subtribe, sub-denomination, subclassification, sub-branch, sub-title, sub-base, sub-arch, sub-district, sub-continent / sub-office, sub-bureau, sub-lease, sub-contract* a.o.

3. 55. 3.   Type subway. The type word is recorded from 1828. Other 19th c. cbs are *sub-railway, sub-current, sub-crossing*, all with the meaning '. . . lying underneath or below'. Older are *sub-trench* 1669, *substructure* 1726, *subsoil* 1799, *subsurface* 1778, the last two obviously after *substratum* (= NL *substratum*) 1631.

3. 55. 4.   The type sublingua 'part situated under the tongue' forms cbs used in anatomy and biology. Classical Latin does not know the type, cbs

of this relational basis being formed with the derivative ending *-ium*, as *suburbium* 'suburb', *subbrachia* 'armpits'. It is a type Neo-Latin created, and in English the terms are used in their NL form, as *submentum, subumbrella, suboperculum* etc.

3. 55. 5.   Type s u b - a u d i b l e. AL prefixed *sub-* to adjs, as in *subabsurdus, subacer, subagrestis* etc. etc. which have the meaning 'somewhat or not quite . . .' '. . .ish'. English has imitated the type, originally only with adjs denoting color, as *sub-pale, sub-red, sub-goldish, sub-rubicund, sub-rufe* (= L *rufus*), all 16th c., *sub-albid, sub-rubeous, sub-luteous, sub-virid* (17th c.). Cbs with other adjs occur from the 17th c. on, as *sub-angelical, -divine, -canonical, -rustic, -roscid, -saline, -dulcid, -acid*. Most of the PE words, chiefly adjs used in geometry, medicine and natural history are, however, due to the 19th c. Only terms of geometry are found from about 1750 on. Examples are *sub-cylindrical, -angular, -spherical, -pentagonal, -triangular, -oblong | sub-febrile, -acute, -chronic, -continued | sub-acuminate, -ovoid, -globose, -metallic, -incandescent, -obscure | sub-brachycephalic, -dolichocephalic* 'having an index next below the brachycephalic' etc.

Neo-Latin uses the corresponding parasynthetic adj type s u b u n g u l a t a in zoology to denote divisions of animals where the '. . .' is imperfectly developed. English preserves the Latin form.

3. 55. 6.   In chemistry we have words coined on the type s u b a c e t a t e in which the prf has the shade it conveys to adjs. Names of compounds of this type signify 'having less than the amount normal in . . .', 'basic . . .', as *sub-carbide, sub-nitrate, sub-sulphate, sub-salt*.

3. 55. 7.   The type s u b o r b i t a l 'situated under . . .', 'found near . . .' is chiefly used in terms of anatomy, geography and geology, but also in various other scientific domains. In AL there are many words such as *subocularis, sublucanus, sublunaris, subsolaneus*. Beginning in about 1550 English adapted many Latin words such as *subcelestial, sublunary, subterranean, subcutaneous* a.o., but from about 1600 on, anatomical terms have been freely coined, such as *subrenal, subclavian, sublingual, submucous, submaxillary* (17th c.), *subcostal, subspinal, suboccipital, subaxillary* (18th c.), *suborbital, subcentral, subscapular, sub-bracchial* (19th c.). Terms of geology and geography are *subaquatic, subsolar, submarine, subglacial*; to the domain of psychology belong *subsensual, subsensible, subconscious, subliminal, subnormal*; to the field of botany words such as *subcortical* and *subpetiolar*, an economic term is *submarginal*; words from the nomenclature of music are *subtonic, subdominant, submediant*.

3. 55. 8.   From the 19th c. on, we have *sub-* prefixed to preadjunctal sbs, as orig. with genuine cpds *subsurface waters* 1778, *subsoil plow* 1831, then extended to cbs like *subcaliber projectile, sub-standard merchandise*, in which the prefixed sb does not exist as such.

3. 55. 9.   Prefixed vbs are *sublet, subdivide, subclassify, sublease, subcolonize, subculture* etc., meaning '. . . so as to form a further unit of division'.

3.56.1.   super- /'sjupə(r), 'supə(r)/

forms words with the basic meaning 'over, above'. It represents L *super-* which coined words after the following types: superambulo 'walk about, over', superaddo 'add on top of something', supervaleo 'over-value', super-laudabilis (-*excellens, -exhaustus*) 'exceedingly ...'. All these types are LL though CL has a few *super-* vbs, as *superaddo, superimpono* and some more. The parasynthetic adj type super-mundialis 'situated beyond ...' is Ecclesiastical Latin. The type super-aedificium 'overlying ...' (in locative sense only) is LL. In ML the type super-altare 'that which is placed over ...' arises (a type not imitated in English).

From ME on we have loans from Latin such as *superabundant, super-abundance* (ME), *superadd* 1458, *super-abound* 1447, *super-excellent* 1561, *supernatural* 1526, *super-celestial* 1559. Of English coinages, the word *superfine* 1575 appears to be the oldest word recorded; other adjs follow in the 17th c., as *super-serviceable* 1605, *super-royal* 1612, *super-sensual* 1683, *superlunary* 1614 (after *sublunary*), *superterranean* 1691 (after *subterranean*). But otherwise it is chiefly in the 19th c. that *super-* becomes an English formative. It is used in the phraseology of anatomy, botany, chemistry, medicine. Recently it has also invaded the jargon of record-hunters in business, films and industrial production. The following is a description of the English types and their uses.

3.56.2.   The verbal type super-saturate '... to excess' is weak. We find such vbs as *super-heat, -cool, -saturate, -accumulate, -exceed, -extoll, -reward*, but the usual particle is *over-*.

The type super-irritation 'excessive irritation' forms medical terms such as *super-secretion, super-alkalinity, super-pigmentation*. In general use are words like *super-activity, super-infirmity, super-conformity*.

The type super-sensitive 'excessively ...' is the corresponding adjectival type. Examples are *super-fine, -serviceable, -subtle, -infinite / super-refined, -charged, -civilized, -elated, -peopled / super-acid, -carburetted, -oxygenated* (in chemical use).

3.56.3.   The type super-sensual 'being above or beyond the range etc. of ...' has formed words like *super-terranean, -intellectual, -organic, -physical, -rational, -regal, -secular, -sensible, -conscious, -normal, -sonic, -audible*.

There are a few cbs with *super-* prefixed to a preadjunctal sb on the same prepositional basis 'more than, higher than ...', as superstandard risk, *supergraduate work, superseaman efforts*. The type appears to have arisen in the 80's.

The type super-orbital 'situated above or on the dorsal side of ...' is the locative counterpart of the foregoing type. It has formed adjs used in anatomy, zoology and various other branches of science. Examples are *super-acromial, -central, -glottal, -occipital, -renal / super-aerial, -linear, -marine, -arctic, -glacial*. The implication is sometimes 'situated in or forming the upper part of ...', as in *super-cerebral, -cerebellar, -temporal* (which are, however, less common than *supra-* words).

3.56.4.   The type superstructure corresponds to the L type *super-aedificium*. The meaning is 'over ...', 'overlying ...' in *super-stratum, super-tunic,*

'superposed ...' in *super-commentary, -parasite, -reformation,* 'additional' in *supertax,* 'upper part of ...' in anatomical terms like *super-maxilla, -sulcus, -fissure.* It is rare with words of a more general character where the implication is that of surpassing in status, as in *super-arbiter, -Caesar, -sovereign, -septuagenarian.*

3. 56. 5.   On the other hand, the prf has acquired a shade of superlativity in the type s u p e r m a n '. . . surpassing any of its kind', as in *super-state, -brute, -critic.* The recent jargon of business propaganda and the language of press agents has created such words as *super-film, -production, -dreadnought, -market, -cabinet, -criminal, -gang, -service.* They are coined ad libitum (see MeAL[4], 181 and Spl. I. 372).

3. 56. 6.   In the nomenclature of natural history we have the type s u p e r - f a m i l y 'group or division next higher than . . .', as in *super-order, -species, -suborder.* The type is parallel to the one with *sub-.* On the same basis are formed other technical terms such as *super-cube, -curve, -line, -molecule* where the implication is 'one degree beyond . . .'. A little different are *supersalt* and *superphosphate* with the meaning 'containing an excess of acid'.

3. 56. 7.   The AL type s u p e r a m b u l a r e has produced a few deverbal coinages on a Latin basis, as *supercrescence* 'parasitic growth', *supersaliency* 'the leaping of the male for the act of copulation', *supercolumniation* 'the erection of one order of columns upon another', anglicized Latin ptcs like *supersalient, supernatant, superjacent, supercrescent* and some more.
   Supercargo 'an officer on a merchant ship' is a rendering of Spanish *sobrecargo* the earlier E form of which was *supracargo.*

3. 56. 8.   Cbs based on an adjunct/primary relation usually have the main stress on the prf, a heavy middle stress on the radical i.e. contrastive accent prevails. Under this pattern fall words of the types *superstructure, superfamily, superman.* Cbs of other types have the main stress on the radical and a heavy middle stress on the prf. This pattern is followed also by derivatives from the respective types: *super-sensitivity* follows *super-sensitive, super-irritation* (though apparently also analysable as adjunct/primary group = 'excessive irritation') is treated as a derivative from *superirritate* where the prf has adverbial force.

3. 57.   supra- /'sjuprə, 'suprə/

is in most of its functions the weaker rival of *super-.* It is ultimately L *supra* 'over, above' which is a weak verbal prf in Late Latin (*suprafundo* 'pour over', *suprascribo* 'write above', *suprafatus* 'above-named' and a few more). Modern Latin developed the parasynthetic adj type s u p r a - a x i l l a r i s 'situated above the axilla' which is the only type freely used for new formations in English. There are a few words from the 17th and 18th c., as *supra-mundane, -lunary, -aerial* (17th c.), *supra-lunar, -spinal* (18th c.), but most of the cbs in use date from the 19th c., chiefly terms of anatomy and zoology, coined like s u p r a - a b d o m i n a l 'situated above ... or on the dorsal side of ...', as *supra-acromial, -anal, -renal, -scapular, -clavicular, -occipital, -ocular / branchial, -trochlear, -foliar, -glacial, -coralline, -marine* etc.

The implication is sometimes 'pertaining to, situated on, forming the upper ... or upper part of ...', as in *supra-labial, supra-maxillary.* Cbs of this group are the only ones that are more common than parallel *super-*formations.

Parallel to *super-sensitive* we have the type *supra-sensitive*, parallel to *super-saturate* there is the type *supra-saturate*, while *super-sensual* is matched by the type *supra-sensual*. Parallel to words like *super-maxilla* we have *supra-maxilla* and other cbs.

3. 58.   sur- /sɜ(r)/

has formed very few words. It represents F *sur-* (which goes back to L *super-*). The only word in common usage is *surname* ME which is a rendering of F *surnom*. Other words are *surcoat* ME, orig. also a French word (*surcot*), *surmaster* 1512 'the title of the second master at St. Paul's school, London', the architectural term *surbase* 1678 'a border above the base', the legal terms *surrejoinder* 1542 and *surrebutter* 1601 with the meaning 'answer to ...'. *Surtax* 1881 'additional tax' may be another coinage if it is not merely a rendering of F *surtaxe*.

With the exception of the two legal terms which are stressed on the radical, *sur-* cbs have contrastive stress on the prf and a middle stress on the radical.

3. 59. 1.   trans- /træns, trans/

is a prf of Latin origin and forms words on Latin patterns. The respective Latin types are t r a n s r h e n a n u s 'situated on the other side of the Rhine' and t r a n s - f o r m a r e 'change the form'. English has imitated these types since the 16th c., but the majority are 19th c. or later.

3. 59. 2.

The type t r a n s a t l a n t i c 'lying beyond the Atlantic' is the strongest in English. It is impossible to decide whether the older cbs are anything more than anglicized Latin, as the parasynthetic adj type was strong in Latin. *Trans-marine* 1583, *transalpine* 1590, *transpadane* 1617, *transmontane* 1727, *transfluvial* 1806 have attested Latin originals, but more recent coinages are usually prefixations of English adjs, as *transatlantic* 1779 and newer *transarctic, transequatorial, transisthmian, transpolar, trans-Andean*.

3. 59. 3.

From about 1850 on we have *trans-* prefixed to pre-adjunctal sbs, as in *trans-frontier, transborder, trans-Mississippi, trans-Ural, trans-Baikal* (district or the like).

Parasynthetic adjs from territorial names may have the meaning 'passing across or through ...', as in *trans-American, trans-African, trans-Siberian, trans-Canadian | trans-Balkan, trans-world* (*railway, airline* or the like). The semantic nuance of this group is not Latin. In English it is rare before 1850. *Transalpine* early developed the meaning; but there are only two quotations in OED, one from 1654, another from 1744.

In terms of anatomy the meaning is 'crossing ...', as in *transfrontal, trans-apical, transocular, transuterine*.

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In learned words of a more general character we find the meaning 'transcend-ing, surpassing . . .', as in *transconscious, transempirical, transexperiential, transfinite, transhuman, transmaterial, transmental, transnormal, transrational, transsensual, transsubjective*.

3. 59. 4. With vbs, *trans-* is less frequent. *Transform, transfigure, trans-figurate* are ME loans (French and Latin) analysable as 'change the . . .'. *Transelement* 1567 represents ML *transelementare*, but from the second half of the 16th c. on we may consider *trans-* a derivative morpheme with de-substantival verbs. Examples are *transnature* 1567, *transshape* 1575, *trans-fashion* 1601, *transplace* 1615, *translocate* 1624, *transspeciate* (fr. *species*) 1643, obs. *transcolor* 1664, *transdialect* 1698, *transship* 1792, *transliterate* 1861, *trans-make* 1844. A little different is *transprose* 'render in prose' (under the influence of *translate*) 1671. Semantically the word *transmogrify* 1656 belongs in this group, but etymologically it is prob. a blend of *transmigrate* and *modify*. *Transilluminate* 1900 'pass light through' is obviously influenced by other Latin loans of the same semantic family (*transparent, translucent, trans-splendent*). This type is otherwise isolated in English wf. It is the type we have in *transpierce* 1594 fr. F *transpercer* and in the Latin type *transmittere* 'send through'.

3. 60.   tri- /traɪ/

'three' represents both OGr *tri-* (as in *trisýllabos, trichórdos*) and AL *tri-* (as in *triangulum, tricuspis*). The majority of the English words, however, have a Latin root. As a derivative morpheme, English *tri-* is due to NL which made use of the particle, chiefly in the nomenclature of botany and zoology. The bulk of PE words are coinages made in the 19th c. Terms of botany and zoology are older (18th c.) and are partly adaptations of AL or OGr words. The chief type that has served for word-coinage is
tri-elementary 'having three . . .'. Parasynthetic adjs existed already in CL (*tricornis, trifurcus, triformis*), but the type *tricameratus* arises in LL (represented by words like *triangular* 1541, *triangulate* 1610). Examples are *tri-alate, -annulate, -bracteate, -dentate, -nervate* | *tri-adelphous, -sepalous, -sty-lous, -spermous* (adjs with Greek stems have *-ous*) | *tri-consonantal, -central, -dimensional, -lineal, -lingual, -nominal, -nodal* | *tri-elementary, -fistulary* | *tri-locular, -filar, -macular, -rectangular* | *tri-valve*, all coined on a Neo-Latin basis and all belonging to one or the other field of science.

The prefix does not derive on a native basis of coining proper. Combinations such as *tri-monthly, tri-weekly* 'occurring every three . . ., lasting three . . .', and 19th c. words matching such with *bi-*, are not very common. Parasynthetic adjectives like *trifaced, trilegged* are occasionally found in print, but they are hardly ever heard. The common type is *three-faced*.

In chemistry, *tri-* forms many names of compounds such as *tri-chloride* 'a compound containing three atoms of chlorine together with another element or radical', and parasynthetic adjectives (of the type *tri-elementary*) like *tri-ethylic* 'containing three ethyl groups'. For a detailed discussion see OED s.v. *tri-*.

3. 61.   twi- /twaɪ/

meaning 'two' is a weak prf. Although it goes back to OE as the
same element we have in *twifold* and arch. *twibill* 'axe', most of the cbs
which are in (chiefly occasional) use today are 19th c. and later. Exs of
parasynthetic adjs, the main type, are twi-coloured, *twi-faced, twi-forked,
twi-formed, twi-gated* (the oldest cb rec. in OED, 1573), *twi-pointed, twi-
shaped*. Minor types are illustrated by *twilight* 1420, arch. *twibill* 'axe' OE,
twi-reason (Ben Jonson), *twi-prong* (Browning), *twi-streaming* ptc (Coleridge),
twi-top hill.

In present-day usage such cbs are infrequent and have a literary tinge.

3. 62. 1.   ultra- /ˈʌltrə/

is a prf both in scientific and general use. It is ultimately L *ultra* 'beyond'.
Classical Latin does not use the particle for wf. In Late Latin we find *ultra-
mundanus*, in ML *ultramontanus* and *ultramarinus*. These words were adopted
in English as *ultramarine* 1598, *ultramontane* 1592, *ultramundane* 1656. But it
is only in the 19th c. that *ultra-* becomes a formative in English, thanks to the
extensive use of *ultra-* in NL scientific nomenclature. The meaning conveyed
by the LL and ML adjs was 'situated beyond . . .'. With it we have a few
English adjs of the type
ultramundane, as *ultra-terrestrial, -zodiacal, -Gangetic* and a few more.
On the other hand there are several scientific adjs, terms of physics, as *ultra-red*
'lying beyond . . .', *ultra-violet, ultra-microscopic* 'lying beyond the range of
the microscope'; with the meaning 'more than, exceeding the . . .' we have
ultra-brachycephalic, -dolichocephalic, -basic, -elliptic. A few cbs of a more
general character, such as *ultra-pecuniary, -human, -natural, -phenomenal*
'transcending the limits of the . . .', all 19th c., are hardly more than nonce-
words. To express this shade of meaning, *super-* and *trans-* words are more
common.

3. 62. 2.   The most productive type, however, is the adjectival type

ultra-revolutionary '. . . to the extreme' which has formed such words
as *ultra-royalist, -radical, -religious, -orthodox, -liberal, -loyal, -confident,
-credulous, -exclusive, -ambitious, -modest, -fashionable, -critical, -modern*. The
OED (s.v. *ultra-*) assumes that the type is due to the loans *ultra-revolutionary*
and *ultra-royalist*, taken from French. *Ultra-revolutionary* 1793 is app. the
first word of the group in English, while *ultra-royalist* is not quoted before
1818. *Ultra-fashionable* 1802 and *ultra-affected* 1819 can, however, hardly be
due to the political term *ultra-revolutionary*. The origin of the English type is
explainable without French influence on the basis of 'going beyond the . . .'.
But French usage has doubtless influenced the growth of the English type.
Ultra- cbs become very frequent after 1830, i.e. after the adaptation of F
ultra-révolutionnaire, -radical, -royalist. The shade of 'extremism' in the
English cbs would also testify to French influence.
Several of the preceding cbs may be used as primaries; we also have deriv-
ative sbs such as *ultra-educationist, -papist / -dandyism, -radicalism, -re-
muneration, -Pluralism*.

3. 62. 3.   A few words were coined on Latin *ultra-* phrases: *ultracrepidarian* 'one who goes ultra crepidam, i.e. beyond his last' 1819, *ultrafidian* 'one who goes ultra fidem, beyond mere faith', 'one who is blindly credulous' 1825. Semantically these words belong to the same group as the preceding cbs. So does, to a certain extent, the word *ultramontane*. From the point of view of Italian catholics it had acquired the meaning 'the catholics north of the Alps', whereas from the standpoint of Gallican and Protestant countries the implication 'those extremists and zealots of papal hegemony' developed. The first quotation for this sense in the OED is from 1728.

3. 63. 1.   un- /ʌn/ (type unfair)

is a nominal prf with the basic meaning 'not'. It goes back to the same Indo-European root as OGr *a-, an-,* L *in-,* G *un-.* As far back as OE, the prf was very productive, chiefly with adjs. There are about 1250 words recorded in OE, but most of them had disappeared by 1250, and only a few have survived into PE. Of the exceedingly numerous coinages I give a small list of exs only.

Simple adjs with a native basis are *unclean, uneven, unfair, unmeet, unripe, unwise* (all OE), *unafraid, unfit, unfree, unsmooth, un-British, un-English, un-French.*

The prf combines as freely with adjs of foreign origin: *unable, uncertain, uncommon, unequal, unfirm, unsure, unsafe, unanxious, unartificial* etc.

3. 63. 2.   Derived adjs also take the prf. Denominal derivatives are chiefly characterized by the sfs *-ed* (possessive adjs), *-y, -ly, -ful, -al,* and the semi-sfs *-worthy* and *-like.* Other sfs are less common. Exs are:

unfathered, unhelmeted, unmannered, unprecedented, unprejudiced, unprincipled, unprivileged, unroofed, unshingled etc. (16th c. and later),

unguilty, unholy (OE), *unthrifty, unwealthy, unworthy, uneasy, untidy, un-happy* (ME), *unbloody, unlucky, unhealthy* etc.,

unfatherly, unmotherly, unwomanly, unprincely, unpriestly, unshapely (MoE),

unfruitful (1388), *unarchitectural, unconditional, unconventional, uncircumstantial* (MoE), *unpraiseworthy, unseaworthy, untrustworthy* (19th c.), *ungentlemanlike, unsoldierlike, unladylike* etc. (since c. 1550),

unwholesome, untoothsome, unadventurous, unceremonious, unselfish, unstylish, unpicturesque.

3. 63. 3.   Deverbal derivatives are likewise common. They are all formed with the sf *-able.* Exs of this very productive type, which arose in the 14th c., are *unbearable, unbelievable, unacceptable, unachievable, unadvisable* etc. etc.

Of adjs derived from postpositional verbs (i.e. vbs followed by an unstressed pt), one group drops the pt, as *unavailable, unaccountable, unappealable, unreliable, unswimmable,* another treats the pt as a kind of infix, as in *uncome-at-able, unget-at-able,* with the main stress on the pt. Other coinages of this type have a jocular tinge, as *unrelyuponable, untalkaboutable.* Adjs derived from adverbial verbs (vbs followed by a stressed ptc) all have the character of individual formations, as *undryupable, uncomoverable, unkeepoff-able* etc.

3. 63. 4.   The prf has always been freely attached to participial adjs (first and second ptc). Exs are *unbecoming, unbefitting, unbending, unending, unerring, unfailing, unfeeling, unflagging, unrelenting, untiring* etc. etc., *unbegun, unborn, unbought, unbound, unburied, unwounded* (all OE), *unarmed, unbacked, unbraced, unmasked, unseen, untouched, unstressed* etc etc.

Postpositional vbs form adjs with the second ptc only: *uncared-for, uncalled-for, unwished-for, unheard-of, unthought-of, unslept-in* (16th c. and later, chiefly 19th c.). Adverbial vbs do not follow this type. The OED has an example from Caxton, *unborne-away,* which is, however, isolated.

3. 63. 5.   There is a small group of derivatives from prefixed vbs. Almost all of them are second ptcs, a few are formed with the sf *-able.* The prfs occurring are *be-, dis-, em- / en- / im-, fore-, mis-, pre-, over-.* All are MoE. Exs are *unbeknown, unbeloved, unbespoken, undisbanded, undischarged, undiscouraged, undishonored, undisquieted, unembittered, unembodied, unenclosed, unendangered, unenriched, unmisguided, unpremeditated, unprepossessed, unprepossessing, unforeseeable, unforeseeing, unforeseen, unovercome, unoverthrown.* The corresponding German type is much stronger: *unerziehbar, unverzeihlich* etc etc.

3. 63. 6.   Many adjs are synthetic formations, i.e. their unprefixed counterparts do not exist. Many participial adjs are formed this way, as *unassuming, unflinching, unwincing, unbending, unrelenting, untiring (tiring* is not the opp. of *untiring), unending* a.o. / *unabashed, unseen, untouched* etc. Possessive adjs with *un-* are likewise more frequent than unprefixed ones. We have *unexampled, unparalleled, unprecedented, unprincipled, unmannered, unpriced* etc., but not the positive counterparts as real adjs.

3. 63. 7.   The positive counterparts of some words have become archaic, obsolete or unrecognizable: *unkempt (kempt* 'combed' is now dial.), *uncouth (couth* is orig. the second ptc of OE *cunnan* 'know'), *untoward (toward* is arch. now) are instances of such a development. *Unruly* 1400 is perh. a synthetic formation, though the word *ruly* is also recorded from 1400.

3. 63. 8.   There are adjs to which *un-* is not prefixed, as *good, bad, broad, narrow, strong, weak, deep, shallow* a.o. The OED restricts the non-application of the prf to short adjs of native origin, but it is neither a question of shortness nor of native or foreign origin that explains this phenomenon. The above adjs stand for primary qualities which are not expressed by relational words. A cb like *ungood* would imply that the speaker saw 'bad' as the contradictory opposite of 'good' which he does not. The contrast is one of contrary opposition, and the words expressing the respective notions are coined as individual, non-relational words. We observe the same phenomenon in the name-giving for male and female sex, to mention an exact parallel. As for shortness, we do in fact use *unfair, unsmooth, unfit, unfree, unkind, unwise, unripe, unclean, unfresh* (in Somerset Maugham's short story Rain, used of linen), so shortness does not hold good as an explanation. And with certain pair notions, contradictory opposition appears to be the only way of expression. In English, French, German, Latin, Italian, Spanish, Turkish, the words *just* and *ripe* (and the resp. words in the other languages), for instance, are not matched by

terms of contrary opposition, but by words which are contradictory opposites. Other notions that seem to call for contradictory opposition are those underlying the words *able, apt, capable, practical.* Contrastive instinct plays an important part here. The word *unjust* describes a judge more clearly than any contrary opposite might do. On the other hand, contradictory opposition leaves many possibilities open which a contrary term would not.

According to the OED *un-* was more frequently prefixed to short adjs in the EMoE period where we find *unbroad, undeep, unbold, unglad, ungood, unstrong, unwhole, unwide.* The character of these cbs would, however, have to be investigated.

On the other hand, no contradictory opposites, i.e. no *un-* words, are formed from such adjs as in themselves denote the absence of something, as *bad, evil, wicked, naughty, bare, naked, empty, silly, foolish.* Natural linguistic instinct would not make the sophisticated detour of negativing a negative to obtain a positive. That adjs denoting colors should not take the prf either is likewise self-evident, as colors denote concrete qualities for the eye. We could not describe or qualify a thing by negatively saying that it is not white or red.

3. 63. 9.   As for the competition of *un-* and *in-* see *in-*. On the whole, *un-* has proved the stronger prf, but there are also cases where the *un-* words have passed out of use: *uncredible, uneffable, unexcusable, unexpert, unperfect, unpiteous, unpossible, unformal, unglorious, undubitable, unfirm* have been replaced by *in-* forms, but *dishonest* has taken the place of *unhonest.*

3. 63. 10.   Derivation from compound or parasynthetic adjs is uncommon. A few have general currency, as *unself-conscious* 1866, *un-commonplace* 1873, but others are more or less nonce-words, as *un-booklearned, un-cross-examined, un-cross-examinable, un-mouse-eaten / un-birdlimed, un-landmarked, un-padlocked* or technical terms like *unequal-lengthed, unequal-sided / unbusiness methods, unsociety people, un-birthday present* (= *un-* prefixed to a sb used as preadjunct).

3. 63. 11.   Prefixed sbs have always been less numerous than adjs (the corresponding German type is much stronger). With a very few exceptions, only abstract sbs occur. The prf conveys the meaning 'lack of . . ., absence of . . .'. Exs are *unhealth, untruth, unwisdom* OE, *unlaw* OE-1609, rev. 19th c., *unpeace* arch., *unscience* ME. But other words which are used today, were coined in the MoE period, many of them in the 19th c.: *uncircumcision, unsuccess* (16th c.), *unculture, unintelligence, uninterruption, unobservant, unsatisfaction* (17th c.), *unacceptance, uncandor, unharmony, unheroism, unluck, unpatriotism* a.o. (19th c.).

There are countless sbs in *-ity* and *-ness,* as *unaccountability, unamiability, unreadability, unworkability* etc., *unaccountableness, unacquaintedness, unaffectedness, uncheerfulness* etc. (the latter group is usually older) which must, however, be analysed as derivatives from negative adjs.

Non-abstract are *unbeliever* (after *unbelieving* or *unbelief*), *undeserver* (after *undeserving*), *unfriend,* now chiefly 'a non-Quaker', *unlady.*

3. 63. 12.   The prf is not attached to vbs. The OED has a few back-derived vbs which were in use in the 16—17th c., as *unknow* (f. *unknowing*), *undeserve*

(f. *undeserving*), *unbecome* (f. *unbecoming*), *unbeseem* (f. *unbeseeming*). In OE there were a few vbs derived from negatived adjs, as *unclǽnsian* (f. *unclǽne*), *untrumian* (f. *untrum*). In ME some more were coined, as *untrowen* 'disbelieve' a 1200, *untrust* 'distrust' a 1225, *unbe* 1434, *unbetide* 'not happen' 1374 which have not survived.

For some time (chiefly 16th and 17th c.) *un-* was used with an intensifying function with adjs in *-less*, as *unboundless*, *uncomfortless*, *undauntless*, *uneffectless*, *unhelpless* etc. (see OED).

The prf has a heavy middle stress, with a growing tendency towards (emphatic) full stress. In attributive position, adjs take the main stress on the prf (as an *únbórn child*).

3. 64. 1.   un- /ʌn/ (type unbind)

The prf is generally said to go back to OE *and-*, *ond-* which corresponds to G *ent-*, ultimately identical with OGr *anti* and L *ante*, orig. 'opposite'. This explanation cannot be entirely correct. It is certainly striking to observe that in OE the prf formed a great number of vbs, but that of the whole group only a few survived into ME, the PE vbs *unbind*, *undo*, *unfold*, *unknit*, *untie*, *unyoke*. In others the prf is no longer recognizable, as in *abide* (f. *onbīdan*) and *answer* (*ondswarian*). Before consonants the prf was generally reduced to *on-* which was further weakened to *a-* and finally dropped. We note that only in a small number of OE vbs did the prf have the meaning of PE *un-*. Beside the reversative sense, it conveyed an inchoative nuance (as in *onginnan* 'begin', *onslǽpan* 'fall asleep'), a perfective nuance (as in *ongietan* 'understand', *onliesan* 'redeem'), a separative nuance (as in *onsendan* 'send forth', *onspringan* 'spring forth'). The PE reversative shade is found in *onwindan* 'unwind' (*unwind* was coined anew in ME), *onlūcan* 'unlock' (*unlock* was coined anew in LME), *unhlīdan* 'unlid' (*unlid* was coined anew in ME), *ongierwan* 'undress', the before-mentioned *unfealdan*, *ungirdan*, *uncnyttan*, *ungeocian*, *unbindan*, *undōn* (*andōn*, *ondōn*), *untīgan* (*ontīgan*) 'unfold, ungird, unknit, unyoke, unbind, undo, untie'. We notice that *on-* had given way to *un-* as early as OE, which certainly does not mean a mere spelling variant. Possibly starting from second ptc forms, the prf *on-* had come to be felt connected with the negative prf *un-*. The idea of negativity is common to both (cp. for a parallel case the prf *dis-*). What distinguishes *unbound* 'not bound' from *unbound* 'loosened' is only the additional idea of an action preceding the state of being loosened, but the state itself is the same. It is therefore, I think, on account of this semantic connection that *on-* did not die out like so many other OE prefixes, but, on the contrary, became a productive verbal prf. Its semantic range is smaller than that of the corresponding G *ent-* which developed the various functions OE *and-*, *ond-* had (see above; for the use of *ent-* see Wi 111/118).

3. 64. 2.

The prf reverses the result of the action expressed by the simple vb. This explains why almost all prefixed vbs are transitive or transitively used. The phenomenon is parallel to the one we observe with *re-*, the latter expressing a double undoing, so to speak. Sometimes the grammatical object is not expressed but merely implied, as with *uncoil*, *undress*, *unmarry* which have

a zero object. The following is a short list of reversative verbs coined since the Middle English period.

Before 1500 are recorded un b u t t o n, *unblindfold, unbolt, uncharge, unclench, unclothe, uncover, unfasten, unjoint, unlace, unlade, unlearn, unlid, unlock, unmake, unnail, unpin, unroll, unsay, unsheathe, untwine, unwind*; from the 16th c. are recorded *unbewitch, unbless, unblind, uncharm, unclasp, unconsecrate, uncross, undeceive, undress, unfreeze, unglue, ungum, unknow, unknot, unlive, unload, unmarry, unriddle, unsnarl, untackle, unteach, untwist, unveil, unwish.* In the 17th c. we find *unblock, unbeget, uncivilize, unclew (unclue), undraw, unfurl, unlatch, unlink, unmould, unmount, unravel*, in the 18th c. *uncoil, unlay* 'untwist a rope'. Later are recorded *unclamp* 1809, *unwrite* 1820, *ungear* 1828, *unhitch* 1862, *unstick* 1913, *unfreeze* (capital, credits) 1947 (q. Za 115).

3. 64. 3. With denominal vbs the implication is 'remove, release from . . .', or 'deprive of . . .'. Denominal vbs existed in OE (as in OHG), but the type was weak. We find *ungeocian* 'unyoke', *unhādian* 'deprive of ecclesiastical orders', *unhlīdian* 'remove the lid', *unscōgian* 'unshoe' (recoined in the 15th c.), *uninseglian* 'unseal' (*unseal* is 15th c.). Late Middle English are un h o u s e, *unbrace, uncouple, unhorse, unearth, unroot, unship*. The growing possibilities of derivation with a zero morpheme have obviously favored the development. From the 16th c. are recorded *unbosom, unbody, unburden, unbreech, uncloak, uncloud, unbit* 'free a horse from the bit', *unperch, unhood, unkennel, unstock* 'remove a ship from the stocks'. From the 17th c. we have *unhand, unbag, uncage, ungrave, unhinge, unhook, unsphere* (as stars), *unpile*. In this group the meaning is 'remove, release from . . .'. A variant ot this meaning is the sense 'deprive, strip of . . .'. Whether the analysis should be one or the other is not always clear; *unhouse, unhorse, unharness, unsocket* and others admit of either analysis. I will give a few instances in which the analysis is more or less clearly 'deprive, strip of . . .': *unhair, unhead, unshoe* (15th c.), *unboot, unbalance, unparadise* 'expel from p.', *ungirth, unharbor, unheart, unlead, unmantle, unmask* (16th c.), *unbed, uncurtain, unballast, undevil, unessence, unfrock, unnerve* (17th c.), *unguard* (18th c.), *unshawl, unbonnet* (19th c.), *unvizard* 1911, *unsight* 1923, *uncharter* 1928.

3. 64. 4. The implication is sometimes 'deprive of the character or quality of . . .', as in *unvoice* (in phonetic use), *unsin, unsex*, deadjectival *unquiet* (15th c.), *unround, unsmooth, uncalm* (all 17th c.), *untidy* (1891). The vbs with an adjectival root are perhaps partly converted negative adjs. *Undouble* is certainly the reversative of *double, unround* as a phonetic term the reversative of *round*. Derivatives from adjs are rare, anyhow.

Vbs having a personal sb for a basis often have the privative meaning of the last group, as *unpriest* 1550, *unpope* 1563, *unking* 1578, *unbishop, unman* 1598, *unchild* 1605, *unknight* 1623, *unbrother* 1634, *uncardinal* 1642, *ungentleman* 1671 with meaning 'deprive of the character, status, quality, or title of . . .'. With the exception of *unman*, however, none of the verbs is in common use.

3. 64. 5. From about 1600 on we find parasynthetic vbs in *-ize* (also in *-ify*). Exs are *uncivilize, uncanonize, unnaturalize, unbarbarize* (first half of the 17th

c.), *unchristianize, unhumanize* (18th c.) / *unsanctify* 1594, *undeify* 1637, *undignify* 1707, *unglorify* 1740. OED (s.v. *un²-* 6 c) has many 19th c. formations (chiefly in *-ize*). But the number of dictionary entries is no proof of the frequency of these words which are all uncommon. The relevant derivational type is *de-militarize*. Second participles, as *uncivilized, undignified*, do occur, but they have to be analysed as adjectives of the type *un-pleasant*.

Occasionally *un-* redundantly intensifies vbs which have in themselves a privative meaning, as in *unloose* 1362, *unpick* 1377, *unrip* 1513, *unbare* 1530, *undecipher* 1654. Cf. 3. 15. 6.

3. 65.   uni- /'juɪn/

is correlative with *multi-, bi-, tri-* and is the Latin counterpart of Gr *mono-*. As an English formative, it chiefly coins parasynthetic adjs as biological terms on NL patterns. Classical Latin had very few parasynthetic adjs, as *unicolor, uniformis, unimanus* / *unanimus, unoculus* (*un-* before a vowel, but from LL on the *un-* form passes out of use). For the modern words Pliny paved the way with *unicalamus, unicornis, uniiugus, unistirpis*. Subsequently these adjs were derived with adjectival endings (*-alis, -aris, -inus, -atus*), and it is these which NL uses and English imitates (with *-ate* also in the extended form *-ated*). From the 15th c. on we have adaptations of Latin adjs, as *univocate* 1432/50, *univocal* 1541 (recognizable as loans by their stress on the second syllable), *uniform, unison* (16th c.), *unicornous, unireme* (17th c.).

English coinages on the above NL patterns occur from the 18th c. on. But the majority of new formations are from the 19th c. Examples are u n i a n g u-late, *unicapsular, unicellular, unilocular, uniglobular, unipolar, uninuclear, univalvular* / *uniangulate, uniarticulate, uniauriculate, uniflagellate, unifoliate, unilabiate* / *uniaxial, unicameral, unidirectional, unilingual, unisexual, unipersonal, unispiral* / *unipetalous*.

On the native pattern of possessive adjs are formed *unilobed, univalved*. English has formed a few bahuvrihi sbs (after the L type *unimamma* 'amazon') like u n i v a l v e 'a mollusc' 1661, *unicell, unicode, unicycle* 'monocycle'. An early loan of this type is *unicorn* ME (= *unicornis* of the Vulgate).

Occasionally *uni-* is prefixed to preadjunctal sbs, as in *unisoil farm* 1778, *unirhyme stanzas* 1859, *unidirection current* 1888 a.o.

In sbs and preadjunctal sbs the main stress is on the prf while the radical has a full middle stress. In parasynthetic adjs the main stress is on the radical, the prf receives a middle stress.

3. 66. 1.   vice- /vaɪs/

is a prf chiefly with words denoting the holder of an office and implies various shades of 'delegacy, deputyship' with respect to the real holder of the title of office. Etymologically, *vice* is a Latin ablative with meaning 'in the place, instead'. Parallel to *pro-* (to which it comes nearest semantically) and *ex-*, *vice-* has resulted from syntactical groups of the type *vice quaestoris*. The first instance of a Latin cpd seems to be *vice-quaestor* LL 'proquaestor'. Ecclesiastical Latin formed the term *vicedominus*, app. the title for one who

represented a dignitary of the Church as his judge. ML are *viceconsul, vice-decanus, viceprinceps, vicerector, vicerex*. In OF we find *visdame* 'vicedominus' (13th c.), *vezcuntes* 'vicecomes' (12th c.), *visamiral* 1339, *vischancellier* 15th c. which were respectively anglicized as *viscount* 1387, *vischancellor* 15th c. Under Latin influence the prf was in the 16th c. refashioned into *vice-* (the same process took place in French), and *viceadmiral* 1520 is only found with this spelling. On the other hand, *viscount* and *viscountess*, as fixed terms of nobility, kept their form, and their pronunciation shows that they are not analysed as prefix-formations.

3. 66. 2.   From the close of the 15th c. on, the prf can be considered an English formative: *vice-collector* is recorded from 1497; from the 16th c. are recorded vice-consul, *-dean, -master, -gerent, -agent, -roy, -regent, -lieutenant, -president* (and other less common words such as *vice-captain, -cardinal, -censor, -commissary, -abbot, -apostle, -architect, -governor, -king, -queen, -god, -legate, -chamberlain, -treasurer, -warden*). Today the prf is in use only with words denoting high academic or state titles.

There are derivatives from the preceding cbs and also such cbs with non-personal words as are associated with the idea 'office', as *vice-admiralty, -royalty, -gerency, -principalship, -papacy / vice-chair, -government, -throne*. No instances occur before the close of the 16th c.: *vice-papacy* 1574 appears to be the earliest cb recorded. Modern is *vice-county* 'county area with regard to the distribution of species of plants etc.' 1859, the only cb that does not connote the idea 'office'.

Derived adjs do not make their appearance before the 17th c.: *vice-ministerial* 1617, *-apostolical* 1641, *-royal, -regal* 1839 a.o. A nonce-word is the derivative vb *vice-reign* 1889.

IV. SUFFIXATION

The term 'suffix'

4. 1. 1.   A suffix is a derivative final element which is or formerly was productive in forming words. A sf has semantic value, but it does not occur as an independent speech unit. In a looser way, the term is often applied to final elements of foreign origin which have a merely adaptational character. The chief representative of this group is verbal *-ate* which serves to adapt real or potential Latin verbs in *-are*.

Suffixes and endings

4. 1. 2.   It is necessary to point out the similarity and difference between derivative and functional morphemes. Morphologically, two words such as *citizens* and *citizenry* are formed after the same principle of 'root plus affix'. At first sight, the conceptual structure also looks very much alike: the *-s* of *citizens* and the *-ry* of *citizenry* both express the idea of plurality, collectivity. But the difference involved is one between grammatical function and lexical meaning. The *-s* of *citizens* is the inflectional formative of the grammatical category 'plural', whereas *-ry* forms a class of words with the semantic basis 'group, collectivity of . . .'.

A suffixal derivative is primarily a lexical form. It is a two-morpheme word which behaves like a one-morpheme word in that it is "grammatically equivalent to any simple word in all the constructions where it occurs" (Bloch-Trager, OLA 54). An inflected word is primarily a grammatical form which does not meet the requirements just stated. While in a sentence such as *this citizenry feels insulted* we could substitute the simple, one-morpheme words *crowd, multitude, nation* for bi-morphemic *citizenry* without any change in the behavior of the other members of the sentence, replacement by the two-morpheme word *citizens* would involve a change of *this* to *these* and of *feels* to *feel*. The formatives *-er, -est* as expressing degress of comparison are endings, not suffixes. In a sentence such as *Paul is older than Peter* we could not substitute any one-morpheme word for bi-morphemic *old-er* whereas in *he is rather oldish* the adj *old* can take the place of *old-ish*. It will also be interesting to note the different phonetic make-up of comparatives and superlatives as compared with derived adjs. *Youngish, longish* betray the morpheme boundary before *-ish* in that the final consonant does not change before the initial vowel of the derivative suffix whereas in *younger, longer* the consonants are treated as standing in medial position in unit words, just like *finger* or *clangor*, [ŋg] being the antevocalic (and antesonantic) allophone of /ŋ/.

4. 1. 3.   Functional morphemes do not belong in a book on word-formation. Jespersen does not make the distinction between derivative and functional

morphemes, but treats accidence together with word-formation in the sixth
volume of his Modern English Grammar. It is not, however, always easy to
draw the line. Tense, number, or case denoting morphemes are easily recogniz-
able as endings as they do not constitute new words, but forms of words.
Inflected words are grammatically conditioned variants of independent
morphemes, so to speak. In other cases, the decision is more difficult. The
functional character of participial and gerundial *-ing* is evident. Moreover,
we cannot substitute any one-morpheme word for either in all constructions
(*we are shooting rabbits*; *shooting rabbits is considered great fun*). But in other
cases the test fails us, as for agent and actions sbs: in *he is a writer*; *this is
a list of his writings* the grammatical behavior of *writer, writing* is the same as
that of e.g. *author* resp. *book*. But again it is obvious that, when the words are
used as mere verbal, not as deverbal sbs (as in *the writer of this letter*; *the
writing of this letter*), the morphemes are functional rather than derivative.
As functional formatives of verbal sbs they have been excluded, but as deriv-
ative morphemes of deverbal sbs they form new lexical units and have ac-
cordingly been treated. For adverbial *-ly* the test likewise fails, but the pre-
dominantly functional character of the morpheme is manifest. It chiefly serves
to turn a secondary, i.e. an adjective (rarely a primary, i.e. a substantive) into
a tertiary (subjunct). The difference between *quick* and *quickly* is one of
function rather than of meaning.

The origin of suffixes

4. 1. 4.   As to the origin of sfs, there are two ways in which a sf may come
into existence: 1) the sf was once an independent word but is no longer one;
2) the sf has originated as such, usually as a result of secretion. Case 1) applies
to a few native sfs only. The sfs *-dom* and *-hood* are independent words still
in OE, so the process whereby a second-word becomes a sf can be observed
historically. In other Germanic languages a similar development has taken
place for the equivalent of E *-ship* (see Wi 295ff. with further material for
suffixes which do not occur in English). An instance of case 2) is the sf *-ling*
which is simply the extended form of sf *-ing* in words whose stem ended in *-l*.

Half-way between second-words and sfs are certain second elements which
are still felt to be words though they are no longer used in isolation: *-monger,
-wright* and *-wise* exist only as second parts of cbs. I have treated them as
semi-suffixes. The fact that a word is frequently used as the second element
of a cb gives us no right to call it a suffix. Thus the following are not sfs:
-caster (as in *broadcaster, gamecaster, newscaster*), *-fiend* (as in the AE words
cigarette-fiend, opium-fiend, absinthe-fiend, cocaine-fiend etc., see MeAL[4], Spl.
I. 370), *-craft* (as in *witchcraft, leechcraft, priestcraft, statecraft, smithcraft, mother-
craft*), or *-proof* (as in *bomb-, fire-, rain-, sound-, water-, hole-, kiss-, humor-* etc.
proof) which Jespersen (VI. 25. 28) wrongly terms one.

4. 1. 5.   The contact of English with various foreign languages has led to the
adoption of countless foreign words. In the process, many derivative mor-
phemes have also been introduced, suffixes as well as prefixes. As a consequence,
we have many hybrid types of composites. We have to distinguish between

two basic groups. A foreign word is combined with a native affix, as in *clear-ness*, *un-button*. Just as the introduction of a foreign word is an essentially uncomplicated matter, so is its combination with a native derivative element. As no structural problem is involved in the use of a foreign lexical unit, it can be treated like native words. This is the reason why native prefixes and suffixes were added to French words almost immediately after the words had been introduced. Suffixes such as *-ful, -less, -ness* were early used with French words so we find *faithful, faithless, clearness* and others recorded by 1300. The case is different with foreign affixes added to native words. Here, the assimilation of a structural pattern is involved, not merely the adoption of a lexical unit. Before the foreign affix can be used, a foreign syntagma must have come to be familiar with speakers so that the pattern of analysis may be imitated and the dependent morpheme be used with native words. This is much more complicated. When it does happen, such formations are found much later than those of the first type. This is to be regarded as a general linguistic phenomenon. It explains why combinations of the types *break-age, hindr-ance, yeoman-ry* crop up much later (about 1375 at the earliest) and are less numerous. The early assimilation of *-able* is exceptional. Some foreign affixes, as *-ance, -al* (type *arrival*), *-ity* have never become productive with native words.

4.1.6. The majority of foreign suffixes owe their existence to the reinterpretation of loans. When a foreign word comes to be analysed as a composite, a syntagma, it may acquire derivative force. The syntagmatic character of a word therefore is a precondition for the development of a derivative morpheme.

From *landscape* (which is Du *landschap*) resulted *scape* which is almost entirely used as the second element of cbs, as in *seascape* 1799 and later *earthscape, cloudscape, sandscape, mountainscape, moonscape, parkscape, skyscape, waterscape, house-scape, roadscape, mindscape*. *Bootlegger* attracted *booklegger* 'one trading in obscene books', *foodlegger* 'illicit foodseller', *meatlegger, tirelegger* (used at a time when things were rationed in U.S.).

The word *hierarchy* attracted *squir(e)archy* 1804, which does not, however, mean that there is a suffix *-archy* (listed as such by Jespersen VI. 25. 52). The attraction is prob. due to the rime only, and other coinages have not been made.

After *multitude* Milton coined *infinitude* 1641 which attracted *finitude* 1644 and *definitude* 1836. *Rectitude* (= LL *rectitudo*) caused the nonce-word *correctitude* (q. Jesp. VI. 24. 98); *adaptitude* 1842 is a blend of *adapt* and *aptitude*. But such coinages do not make for a "suffix" *-tude* (treated Jesp. l. c.; if treated as a sf, its form is *-itude* on a native basis with *correct, adapt*, and it is *-ude* with *infinitude, definitude*; but the analysis has not led to other coinages).

In American English there are words like *fruitade, gingerade, limeade, pineappleade* etc. (see MeAL[4], Spl. I. 358), formed with the suffix *-ade*, after *lemonade, orangeade*. They are of established currency now.

Outspoken American slang is the sf *-eroo* with endearing force which has coined such words as *flopperoo, checkeroo, jokeroo, bummeroo, kisseroo*. H. Wentworth (ASp 17, 1942, p. 10—15) supposes that the starting-point is *buckaroo*, a corruption of Spanish *vaquero* 'cowboy' (see also ASp 18. 71, 1943).

Another AE sf is *-eteria* with meaning 'shop, store, establishment'. The starting-point is prob. Mexican Spanish *cafetería* which passed into American English (first used about 1893, see MeAL[4], Spl. I. 350—354). As it was immediately analysable in American English, with the first element interpreted as an allomorph of /kɒfɪ/, it attracted a good number of words (chiefly since 1930). Mencken has about 50 words, such as *basketeria, caketeria, candyteria, cleaneteria, luncheteria, drygoodsteria, drugteria, fruiteria, shoeteria, chocolateria, furnitureteria*. The original implication was 'place where articles are sold on the self-service plan' (so in the recent coinage *gas-a-teria*, Life International, vol. 5. 48, Dec. 6, 1948). The only common word, however, is *cafetéria*, stressed as indicated. The sf is discussed at length by Mencken with reference to the pretty extensive literature.

4. 1. 7.   The process of secretion requires some more comment. The basic principle is that of re-interpretation; but there are several ways in which re-interpretation occurs.

1) A cb may be analysed by the general speaker as having two constituent elements, the basis as an independent morpheme and the sf as a derivative element. This is the case of the preceding types *lemonade* and *land-scape*. This process of direct re-interpretation is the form secretion commonly assumes.

2) A cb is not made up of two constituent elements as far as the general speaker is concerned. If *aristocracy, democracy, plutocracy* yield more or less jocular words such as *landocracy, mobocracy, cottonocracy*, this is due to a meeting and blending of two heterogeneous structural systems: a certain structural element of one linguistic system is isolated and introduced into another linguistic system. The speaker with a knowledge of Greek isolates *-ocracy* 'rule' in a series of Greek-coined words and introduces it as a derivative element into the structural system of English. But dependent structural elements are tied up with certain morphologic conditions of the linguistic system to which they belong and cannot therefore be naturally transplanted, unlike words which are independent lexical elements, not subject to any specific morphologic conditions. Such coinages are felt to be hybrids by the word-coiner himself, so the process is not used for serious purposes as a rule. Admittance of such foreign derivative elements is also impeded by the fact that they bear no resemblance to any morpheme with which the hearer of the hybrid cb is familiar. The linguistic situation is different with foreign-coined words of which one element is immediately associated with a morpheme of the hearer's language. Words like *barometer, thermometer* are automatically connected with the independent word *meter* whose unstressed allomorph the words contain. This explains the rise and currency of *speedometer, creamometer*, and quite recent *drunkometer* (1939, see ASp 24. 74 (1949)). But otherwise, hybrid coinages of this derivative pattern will always have a limited range of currency or the tinge of facetiousness, as *bumpology, bumposopher* (both jocular from *bump* 'protuberance on the cranium as the sign of special mental faculties'), *storiology, weatherology, dollolatry* a.o. Parallel to the above words in *-ocracy* are such in *-ocrat*, as *mobocrat, bankocrat, shopocrat*.

Very similar to the case of *barometer/speedometer* is that of the American sf *-fest*[1]. From the German words *Sängerfest* and *Turnfest*, which were first used in the early 50's in U.S., a series of other words were derived, such as *smokefest, walkfest, eatfest, stuntfest, bookfest, gabfest*. The element *-fest* was obviously interpreted as the 'allomorph' of *feast*. The word *cavalcade* was re-interpreted as containing the element *caval-* 'horse' and the sf *-cade* 'parade' and attracted such coinings as *aerocade, aquacade* (on a Latin basis of coining), *autocade, camelcade, motorcade* (on a native basis of coining), recent words which may not stand the test of time. From the word *panorama* the character-istic ending *-rama* was secreted with the meaning 'pageant, show' and has recently led to such words as *cinerama, motorama, autorama*[2].

Sometimes ignorant but pretentious people take to coining words, re-inter-preting foreign words in their own way. They vaguely feel that there is some characteristic termination in a Greek or Latin word which they then attach to some English basis to give the cb a 'learned' tinge. As a result, we get barbarisms in *-athon*, coined after *Marathon*, such as *danceathon, swimathon* etc., in *-torium*, such as *corsetorium, lubritorium* etc.[3]

Thus, the rise of sfs illustrated by types *aristocracy/landocracy, barometer/speedometer* and others treated in the preceding passage can stay out of account for suffixal derivation.

4. 1. 8.   There is yet a third way in which sfs may arise. Words of apparently only one constituent element may develop derivative morphemes. If we take such a word as *hamburger*, we observe that it has attracted other coinings like *cheeseburger, beefburger, fishburger*. The analysis of the word cannot be, as one may feel tempted to assume, that of *ham* and *burger* as there is no ham in the hamburger. So the word *cheeseburger* has not arisen from re-inter-pretation. What has taken place is a shortening of the morpheme *hamburger* into a fore-clipped *-burger*, this part being taken as representative of the semantic elements contained in *hamburger*[4]. The cb *cheeseburger* therefore is a clipped word for non-existent *cheese hamburger*. Parallel to *-burger* words are such in *-furter, as shrimpfurter, krautfurter, chickenfurter* (see ASp 25 (1950) 315 and 27 (1952) 153—154). In election campaign words such as *Hoovercrat, Willkiecrat, -crat* was short for *democrat*. The word *telegram* 1852 gave rise to *cablegram, radiogram, pidgeongram, lettergram* where *-gram* is short for *telegram*. The diminutive sf *-ling* originated in the same way. *Wolfling* 'young wolf' is a blend of *wolf* and *young-ling* 'young animal'.

Nominal and verbal suffixes

4. 1. 9.   In PE there are nominal and verbal sfs. The sfs *-fold, -most*, and *-ward* form words which are used both as adjs and adverbs. From the formal point of view, the only group that needs an explanation are the verbal sfs. We

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[1] (See L. Pound, Domestication of the suffix *-fest*. Dialect Notes vol. IV part V. 1916).

[2] The suffix '*-rama*', by John Lotz, ASp 29. 156—158, 1954.

[3] The *-thon* suffix, by Eugene Nolte. ASp 29 (1954) 229 for *-torium* see Me AL[4], 179, also ASp 27 (1952) 72—73.

[4] For *-burger* words see ASp 19. 308—309, 1944; 23. 37—74, 1948; 25. 315—316, 1950.

remember that there was no formation of compound vbs with a noun (sb or
adj) for a first-word in OE. As we take compounding to be the historical stage
preceding suffixing, we shall not be surprised to see that there are no old
verbal sfs either. The old form of derivation in such cases was that of derivation
without a derivative morpheme (see 5. 1 ff.). PE -ate, -ify, and -ize are due to
foreign influences. On the other hand, we have two sfs (-er and -le) deriving
from verbal bases which form iterative and frequentative vbs. For -en see 4. 2. 8.

4. 1. 10.   The meaning of a suffix is conditioned by the particular semantic
character of the basis to which the sf is attached, also by the linguistic circum-
stances in which the coinage is made. In general parlance, a *fiver* is a bill of
five (dollars or pounds), in cricket jargon it is a hit for five, in school life it may
denote a boy who always scrapes through with a five. A *greening* is a green
variety of apple or pear, but a *whiting* is a white variety of fish. For other pos-
sibilities see -er and -ing, for instance. Some concepts are apt to be represented
by sfs in many languages, as those of condition (state, quality etc.), appurte-
nance, collectivity, endearment, agent a.o., but theoretically there is no
telling what concept may not develop to find expression in a sf. French has
a sf -ier (type *pommier*) to denote fruit trees, there is L -ile for the idea of
'stable for domestic animals', OGr had a sf -itis (type *nephritis*) meaning
'disease'. These have no parallels in English, or in German either. But no
intrinsic linguistic principle is involved in the absence of such morphemes. The
rise of new sfs in English (4. 1. 6 ff.) goes to corroborate this.

A few words are needed with regard to deverbal derivatives. A deverbal
derivative is not fundamentally different from a cpd whose first member is a
verb stem, so, as in the case of denominal sfs, a great number of meanings are
possible (cp. 4. 30. 10 for instance). In practice, however, the possibilities are
much restricted. Deverbal sfs express grammatical functions rather than
semantic concepts, and the usual implications are 'act, fact, instance of . . .'
(*arrival, guidance, warning*), sometimes 'state of . . .' (*starvation, bewilderment*),
'agent' (personal or impersonal: *baker, eraser, disinfectant*), 'personal object'
(direct or indirect, only with -ee: *transferee, draftee*), 'object of result' (*breakage,
savings*), 'place' (*settlement, brewery, lodgings*). Similar considerations apply
to derivation by a zero morpheme (*pickpocket, blackout, look*). See also index
of principal sense groups of morphemes.

The two morphological bases of derivation

4. 1. 11.   To give a preliminary survey of the several methods of suffixing in
English we may distinguish six ways: 1) Derivation by native sfs, as *goodness*
f. *good*. This process involves no changes of stress, vowels or consonants in
the derivative as against the basis. 2) Derivation by means of imported sfs
under the same phonologic conditions as group 1), as *lovable* f. *love*. 3) Deriva-
tion by means of imported sfs, involving phonologic changes of stress, vowels or
consonants, as *Japanése* f. *Japán*, *historícity* from *históric*. The three preceding
groups will be referred to as word-formation on a native basis of coining
(wfnb). 4) The sf is tacked on not to an English word but on to a Latin stem
which closely resembles, however, the word that stands for it in English, as

scient-ist f. *science.* 5) The sf is tacked on to a Latin or Greek stem which has, however, no adapted English equivalent, as *lingual* from L *lingua, chronic* f. Gr *chrónos.* Groups 4) and 5) will be referred to as word-formation on a foreign or Neo-Latin basis of coining (*wffb*). 6) Words which have originally been borrowed separately come to take on the form of derivative alternations in English on whose pattern new words may be derived: on the analogy of *piracy* as from *pirate, candidacy* can be formed from *candidate.* This method will be referred to as correlative derivation.

4. 1. 12.   The difference made here between the two methods of wfnb and wffb does not correspond to the traditional distinction between derivation by means of native and foreign sfs. For native sfs, as pointed out, the derivative basis is always native. But with sfs of foreign origin the basis of coining may be either native or foreign or both. The sf *-al* derives *postal, seasonal* f. E *post, season,* and *lingual* f. L stem *lingua, horizontal* f. Gr stem *horizont-;* *-ify* forms *dandify, monkeyfy* as well as *aurify, carnify, -ism* derives both words such as *Englishism, Irishism* and *Anglicism, Briticism.* This may suffice to indicate what the reader will find more in extenso under the respective sfs.

Suffixing on a Neo-Latin basis of coining

4. 1. 13.   The question of wffb which I have touched upon in a general way will need a few remarks with special regard to suffixing. As far as is necessary for the restricted treatment of wffb in this book I will give a short summary of the laws of NL derivation, regarding as Latin also Greek words which have been fitted into the Latin structural system. As English has only sfs beginning with a vowel as far as Latin is concerned, we need only discuss these.

L words in *-a* drop the final vowel before the vowel of the sf: *Rom-anus, aqu-osus, Thom-ista.* This explains E *architectur-al, lingu-al, propagand-ize, Spinoz-ism* etc., derivatives from actual or possible L words in *-a.*

L words of the *-o* declension drop the genitive ending: *equ-inus, ole-arius, offici-osus, miracul-osus, Scōt-ista.* Cp E *ocul-ist, balne-al, cloistr-al* (L *claustrum,* in LL pron. *clostrum,* yields OF *cloistre* under the influence of *cloison), asbest-ine* (L *asbestus*) etc.

L words of the *-u* declension retain the u: *actu-alis, spiritu-alis.* English exs are *casu-ist, contractu-al* (though it is at the same time analysed as English-coined *contract-ual*).

L words of the third declension drop the genitive ending: *mar-inus, su-inus, iur-ista, Aristotel-ista.* To this group belong E *carn-ify, multitudin-ous, carbon-ize, dramat-ize.* L stems in *-tat-* simplify the stem into *-t-*: *tempest-ivus, calamit-osus.* This accounts for E derivatives from *-ty* words with an elided vowel: *alacrit-ous, societ-al, facilit-ate, libert-arian, annuit-ant.*

When the stem ends in the same vowel as the sf begins with, the vowel appears only once: *Lat-inus* (f. *Lati-um), evangel-ista, anatom-ista* (f. *anatomi-a).* Correspondingly we have in English *Americ-an, Kore-an, scient-ist, alchem-ize, allerg-ic,* even *alkal-ine* (f. *alkali).* As NL words in *-ia, -ium* are anglicized as *-y* words, we get the alternations *-y/-ic, -y/-ize, -y/-ist, -y/-ism* (*alchemy/ alchemize, allergy/allergic* etc.).

Derivatives from adjs are similarly formed: E *historic-ity, femine-ity* (L *femineus), technical-ity, spectacular-ity.*

With deverbal derivatives the stem is usually that of the second ptc: *pass-ivus, absolut-orius, struct-ura.* Cp. E *product-ive, admiss-ive* etc. (see 4. 5). Less frequent is derivation from the present stem: *cad-ivus,* with elision of the final vowel *noc-ivus, opt-ivus,* a type imitated in English by *cresc-ive, quer-ist* (but cp. 4. 5. 2).

Learned words are chiefly coined on a Neo-Latin basis. Cp. for instance the numerous words in *-ist,* as scholarly or scientific terms all latinizingly derived (e.g. *scientist, psychiatrist,* formed after L *jurista, baptista).* Words used in science, such as *argentic, aurous, bromine, buccal,* are all derived on a Neo-Latin basis. The sf *-aster* is English in the same sense: it forms words on a Latin basis as *musicaster, poetaster, theologaster, criticaster,* but never any such words as **writaster,* **paintaster.* Words in *-ity,* as *catholicity, historicity* fr. *catholic, historic* show by their pronunciation that they are not simply derived from the corresponding adjs (historically speaking). Latin-coined are adjs in *-atory,* as *informatory, observatory, investigatory,* though many can be analysed as native-coined. The sf *-trix* is termed 'a learned feminine suffix' by Jespersen (VI. 15. 94). This does not really explain matters. We observe that *-trix* is only found in genuine Latin words, being the feminine counterpart of masculine sbs in *-tor.* Such words are chiefly found in legal terminology, as *administratrix, executrix, mediatrix, testatrix.* In Geometry, words in *-trix* denote straight lines.

4. 1. 14.   What I have pointed out shows the influence Latin has exercised on the coining of English words. The great share Latin has in the English vocabulary has always been recognized. But this is a matter of linguistic sociology rather, whereas wffb concerns the physiological structure of the vocabulary. The forms of linguistic thought themselves are for a great part Latin. Similar observations could be made about other European languages (French, German) and about international scientific terminology in general (so far as it is not altogether Latin in form).

4. 1. 15.   There are many words, esp. in scientific terminology, which are used in their Latin form. Many words have been coined on English soil which, as technical terms, form part of the English vocabulary. But as most of them have not been actualized, they do not interest us in wf. Their treatment belongs to the external history of the language. Such words sometimes acquire a semi-general currency, as AE *oceanarium* 'underwater zoo', *vocarium* 'collection of gramophone records of the human voice', *abortarium* 'hospital specializing in abortions', *ritualarium* 'Jewish ritual bath' (q. MeAL[4], Spl. I. 355), coined after Latin place-denoting words like *aquarium, terrarium, planetarium* etc.

4. 1. 16.   Suffixing on a foreign morphological basis offers an aspect similar to that observed with prefixes. There are 1) terminal elements which are suffixes in Greek or Latin, as (in anglicized form) *-ic, -ism / -an, -ine;* 2) such final elements as are really second-words of Latin resp. Neo-Latin compounds, as (in anglicized form) *-scope, -tomy / -parous, -facient.* 3) There is a third group of scientific sfs which were artificially coined, but have the appearance

of Latin or Greek sfs: *-ad, -one, -ol, -yl*. In wfnb we have termed sfs such terminal elements as can be tacked to an English word. In wffb, however, the decision is not so easy. The word *scientist* is generally considered a suffixal derivative as *-ist* is universally held to be a sf. A word such as *galvanoscope*, however, is either not analysed at all or said to be *galvano-* plus *-scope* (OED). But what is *-scope*? The OED terms elements like *galvano-* 'combining forms' and elements such as *-scope* 'terminal elements'. This terminology only begs the question as to what these elements really are in wf. In this book I have called 'prefixes' such derivative elements as can be prefixed to full words without, however, being independent words themselves in English. Consequently we might term 'suffixes' such terminal elements as are tacked on to full words without, however, their having an independent existence as words in English. Neither *scientist* nor *galvanoscope* are analysable as 'English word plus affix'. Yet, there is a great structural difference between the two words. The radical of *scientist* is immediately connected with the word *science* of which it is merely an allomorph, so to speak. The case is different with *galvanoscope* and, generally speaking, with cbs with 'terminal elements'. The first-word cannot be connected with any independent English word as its allomorph. I have therefore treated words of the type *scientist* while I have left out cbs with 'terminal elements'.

Occasionally they develop into sfs attached to an English word (wfnb), as in *bumpology, bumposopher* (both jocular from *bump* 'protuberance on the cranium as the sign of special mental faculties'), *bancomania, scribbleomania, queenomaia, leatheroid, hurrygraph, creamometer, speedometer, storiology, weatherology, dollolatry* a.o. But on the whole, these terminal elements coin words within the lines of wffb.

Wf on a NL basis of coining may enter the group of correlative derivation (cp. 4. 1. 17) when both radical and derivative have been introduced into the language so as to represent a derivative alternation (words in *-ic/-icity, -ine/ -inity, -ocious/-ocity* and many others, part of which have been treated in this book). I have not, however, dealt with alternations such as *horizon/horizontal, science/scientist* which have not the character of derivational types in English. Alternations which are not type-forming, have no morphophonemic value. Such cases have been treated under the respective sfs as derivatives on a NL basis of coining.

Derivative alternations

4. 1. 17. The English vocabulary has been greatly enriched by borrowings, chiefly from Latin and French. In course of time, many related words which had come in as separate loans developed a derivational relation to each other, giving rise to derivative alternations. Such derivative alternations fall into three main groups.

Group A is represented by the pairs 1) *-acy/* 2) *-ate* (as *piracy ~ pirate*), 1) *-ancy, -ency/* 2) *-ant, -ent* (as *militancy ~ militant, decency ~ decent*), 1) *-ization/* 2) *-ize* (as *civilization ~ civilize*), 1) *-ification/* 2) *-ify* (as *identification ~ identify*), 1) *-ability/* 2) *-able* (as *respectability ~ respectable*), 1) *-ibility/* 2) *-ible* as *convertibility ~ convertible*), 1) *-ician/* 2) *-ic(s)* (as *statistician ~ sta-*

tistics), 1) *-icity/* 2) *-ic* (as *catholicity* ~ *catholic*), 1) *-inity/* 2) *-ine* (*salinity* ~ *saline*).

If 1) is a derivation from an English word, the only possible word is 2), i.e. if *piracy* is a derivative from an English word, only *pirate* is possible. The statement does not imply that for every 1) there must be a 2). 1) may be a loan, or it may be formed on a Latin basis without any regard to the existence of an English word at all (*enormity*, for instance, is so coined). Nor does the derivational principle involve the existence of a 1) for every 2) (many words in *-able* or *-ine* are not matched by words in *-ability* resp. *-inity*).

Group B is represented by the pairs 1) *-ation/* 2) *-ate* (as *creation* ~ *create*), 1) *-(e)ry/* 2) *-er* (as *carpentry* ~ *carpenter*), 1) *-eress/* 2) *-erer* (as *murderess* ~ *murderer*), 1) *-ious/* 2) *-ion* (as *ambitious* ~ *ambition*, 1) *-atious/* 2) *-ation* (as *vexatious* ~ *vexation*).

If 1) is a derivative from another English word, the derivational pattern 1) from 2) is possible, but not necessary. A derivative in *-ation* such as *reforestation* is connected with *reforest*, a derivative such as *swannery* is connected with *swan*, *archeress* is connected with *archer*, *robustious* is extended from *robust* (but otherwise an adj in *-tious* derived from a sb points to the sb ending in *-tion*, i.e. we have really type A).

Group C is nothing but a variant of A and concerns adjs in *-atious*, as *flirtatious*. Originally deriving from sbs in *-ation*, the type is now equally connected with the unextended radical, i.e. *flirt* (the older derivation *ostentatious* 1658 has not entered this latter derivational connection).

4. 1. 18.   Learned words or scientific terms which are NL or their anglicized adaptations come to enter into morphologic relations with their derivatives formed on a Greek resp. Latin basis of coining. The majority of coinings are formed after the principle of correlative derivation, but sometimes the adaptation of loans has led to patterns of coinage on a native basis, as type *problem/problematic*, *globe/globose*, *herb/herbaceous*. Alternations have been treated under the respective sfs. As I have not dealt with sfs which have not led to coinages on a native basis, I will mention here such as would otherwise have had to be omitted. The types c o r p u s c l e / c o r p u s c u l a r and c a r b u n c l e / c a r b u n c u l a r [sļ/kjələr] resp. [kļ/kjələr] (concern adapted L words in *-culum* deriving adjs in *-cularis* resp. words in *-usculum* deriving adjs in *-uscular*). Exs are *crepuscle/crepuscular*, *muscle/muscular* // *appendicle/appendicular*, *auricle/auricular*, *fascicle/fascicular*, *follicle/follicular*, *furuncle/furuncular* etc.

Type m a n i a / m a n i a c [ɪə/ɪæk].

The type is important on account of the many cbs with *-mania* as a second element. The sf *-ac* resp. *-iac*, as in *prosodiac, elegiac, demoniac, Egyptiac* (marked "obsolete" in OED, but commonly used by Toynbee), forms words on a L basis (all the foregoing words are anglicized Latin *-iacus* words). The termination has proved productive in English thanks to *maniac* (L *maniacus* which seems to be a Latin extension as the Greek pattern is not recorded) and the numerous cbs of which it forms the second element. Exs are *anglomania/anglomaniac, bancomania/bancomaniac, bibliomania/bibliomaniac, egomania/egomaniac, kleptomania/kleptomaniac, megalomania/megalomaniac, scribbleomania/scribbleomaniac* etc. The same alternation we have in *hypochondria/hypochondriac, paranoia/paranoiac*.

Suffixal derivation and stress

4. 1. 19. This question has been much neglected. The accentuation of long English words of non-native origin is usually treated with little regard to the derivative patterns, which makes a few words here all the more desirable[1]. We are, however, only concerned with the principal stress, leaving aside the question of secondary stress. Various trends and tendencies can be observed as acting and counteracting forces in the English stress system.

The most important factor is the tendency toward homological stress. All native sfs and the great majority of foreign sfs are attached without causing the main stress of the radical to change its place (*good/goodness, father/fatherhood || love/loveable, fulfill/fulfillment*).

With words of foreign origin or English coinages formed by means of foreign sfs which do not enter the foregoing group we find either preservation of the foreign stress pattern (in words borrowed or coined in the MoE period) or a correlative stress pattern (see 4. 1. 17).

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[1] O. Jespersen, MEG I. 5. — Stanley S. Newman, On the stress system of English (Word 2. 171 ff.). — B. Danielsson, Studies on the accentuation of polysyllabic Latin, Greek, and Romance loan-words in English, with special reference to those ending in -*able*, -*ate*, -*ator*, -*ible*, -*ic*, -*ical*, and -*ize*. Stockholm Studies in English. III. 1948.

This book has no direct bearing on our subject as the standpoint of the author is not morphological. D. is not primarily interested in the derivative role of stress though he recognizes the stress of underlying English bases (= "derivative accentuation" p. 37 ff.) as an important factor causing deviation from the principal stress patterns. The chief cases relevant to our subject are words in -*able* (pp. 55—86) and -*ize* (pp. 192—216) whose stress patterns bear out what we have termed the homological stress tendency in English. D. is sometimes disinclined to assume derivative stress. The words *analogical, arithmetical, economical, harmonical, hemistichal, nonsensical, philological, physiological, simonical* were formerly stressed on the same syllables as their bases, but D. holds that these stressings "are probably due to misprints" (p. 188). Why? The stress may have been derivative, but then a latinizing tendency set in: the stressing *analógical* arose from the Latin *analógicus* (with -*al* replacing -*us*) or as an extention of E *analógic*, the stress in the latter being again due to the stress in the Latin *analógicus* with the Latin ending dropped (the stress pattern *⏌ic* had come to prevail as early as the 16th c., see Danielsson p. 186).

It does not seem to me to matter very much whether a derivative has four, five, or six syllables so long as a word is derivationally connected with a certain basis. If D., who has set up his types according to the number of syllables of the words, establishes (p. 57) a type of pemptotone accentuation for *aúthorizable, líquefiable*, one of hectotone accentuation for *álkalifiable, mineralizable* etc., we would, from our point of view, simply state that derivation in -*able* does not cause shift of stress with regard to the basis. If we learn that hectotone accentuation "has never been very frequent" (p. 57), we should rather say that, anyway, derivatives of six syllables from tetrasyllabic bases are not numerous. But no stress principle can be involved in D.'s statement. If e.g. *systematize* had derived an adj in -*able* (it does not seem to exist), it could only be stressed on the same syllable as the basis.

Homological stress is a greater force in PE—and Danielsson's extremely valuable book shows that the tendency is several centuries old—than one might think.

4. 1. 20.   The following sfs involve stress shifting as against the stress pattern of the unsuffixed basis. The main stress of the radical becomes a secondary stress in the derivative (the dash indicates the syllable preceding the sf): ⌐al (only in certain cases, see 4. 6. 2), ⌐arian, ⌐ary (only in certain cases, see 4. 13), ⌐ation, -eé, -eén (both type *jackeen* and *velveteen*), -eér, -ése, -ésque, -étte, ⌐ial, ⌐ian, ⌐ious, -idna, ⌐ic, -ician, ⌐ity, partly ⌐ual.

4. 1. 21.   If a foreign-coined word has not been actualized (i.e. is not analysable as composed of two English morphemes, word resp. stem plus sf), it seeks connection with another English word to which it stands in a kind of quasi-derivational relation (as *systematize* after *system*, *decisive* after *decide*, *significative* after *significant*). We can no more than point out this tendency, the study of which would throw interesting side lights on wf. It would show how far words which derivationally speaking have no relation to each other, are felt to be connected.

4. 1. 22.   Loans or foreign-coined words show a tendency to stress the antepenultimate. Cases of loan words and their stress are not relevant to wf, but the tendency has its place here insofar as many sfs form words on a Latin basis of coining (⌐ity, ⌐ial, ⌐ian, ⌐ual) or have become productive on a native basis in the MoE period only when the older antepenultimate stress tendency had long taken root (⌐ical, ⌐ial, ⌐ual, ⌐ian, -árian, -árious, -órial, -órious; ⌐ic owes its stress pattern either to L ⌐icus or older E ⌐ical). The tendency also applies to cases in which a sf has a merely adapting function in anglicizing non-actualized loans (verbal -ate, ⌐ferous, ⌐gerous etc., see 4. 71. 10ff.; -óloger, -ólogist, -ósopher, -ósophist, -ógrapher, -ógraphy, -ólogy, -ósophy, -ólatry, -ócracy and other -y (Gr -ia) words). Historically it accounts for the stress in -ician, -átion which were trisyllabic originally.

4. 1. 23.   In loans or foreign-coined words of three or more syllables, the antepenultimate tendency is counteracted if the last two syllables are closed syllables or if the last is closed and the last but one has a long vowel or diphthong. In this case the next to last is stressed. Relevant to wf are certain cases of sf -al (instruméntal as against *instrument*, see 4. 6. 20). But it may be observed that homological stress is perhaps slowly progressing with regard to words containing a long vowel or diphthong in the last but one. *Súicidal, gérmicidal, hómicidal* are more frequently heard than *suicídal, germicídal, homicídal* (the only stressing the OED gives).

4. 1. 24.   With sfs which acquired derivative force in the MoE period the stress pattern of the language from which the first words were taken, has not been changed, which accounts for the retention of stress on the sfs -ése (Italian), -ésque, -eér, -étte, -eén (French resp. for type *girleen*, Irish), -idna (Latin). That -eé words which are very old in the language have the stress on the sf is probably due to their character as words of a particular group (legal terms). The retention of the foreign stress pattern is the same as that in recent loans from French in -age (*masságe* etc.), -ade (*barricáde* etc.) and from Latin -ose (*bellicóse* etc.). For other such words see Jesp. 1. 5. 8.

4. 1. 25.   The sfs of foreign origin which involve no stress shifting are those which had derivative force already in the ME period. An exception is ⌐ual

for which derivative pairs existed before 1400. Homological stress has not, however, developed (with the exception of *spirit/spiritual*), probably on account of the small number of derivatives (see 4. 6. 18), possibly also under the influence of *ⱡial* words. Other sfs have become productive on a native basis of coining too late for a homological stress pattern to be able to uproot the much older rhythmic stress pattern that had developed with loan words (*ⱡical, ⱡity, ⱡic*; see also above 4. 1. 28). The sf *-ician* also has preserved the ME stress pattern with the original French secondary stress on the first changed into the principal stress. The trisyllabic form, common till the 16th c. (see Jesp. I. 9. 87), is probably one of the reasons. Otherwise the derivative alternation *magic/magician* existed as early as the 14th c. (see 4. 44. 1).

4. 1. 26. With the stressing of words in *-ation, -arian, -arious, -orial, -orious* the Latin has probably played a part. The speaker was certainly conscious of the Latin words in *-átio, -árius, -órius* for which the English words stood. It is otherwise difficult to understand why no homological stress pattern should have developed between *purify/purification, canonize/canonization* though the derivative alternations are as old as the 14th c.

Phonological changes of vowel or consonant in derivation

4. 1. 27. Derivation by means of foreign sfs, esp. those which derive on a NL basis, often involve phonological changes of vowel or consonant. Vowel and consonant changes most often go with stress shift. In several cases, however, we have vocalic and consonantal alternations but no shifted stress. Exs of the latter are: sincére/sincérity [ir/ɛrɪtɪ], *austere/austerity, severe/severity, extreme/extremity*; bronchítis/bronchític [aɪtɪs/ɪtɪk], *otitis/otitic, peritonitis/peritonitic*; tenácious/tenácity [ešəs/æsɪtɪ], *capacious/capacity, predacious/predacity*; feróocious/feróocity [ošəs/ɒsɪtɪ], *atrocious/atrocity*.

Vowel and consonant changes are accompanied by stress shift in the following cases:

Type ártifice/artifícial, ávarice/avarícious [ɪs/ɪšəl] resp. [ɪs/ɪšəs].

If a word in *-ice*, pron. [ɪs] (or occ. [aɪs]) derives by means of a sf beginning with [ɪ] (chiefly *-ial, -iary, -ious*), we have the alternation [ɪs (aɪs) /ɪšəl, ɪšərɪ, ɪšəs]. Exs are *benefice/beneficial, beneficiary, auspice/auspicial, auspicious, prejudice/prejudicial, office/official, officious*, with [ai] in the radical *sacrifice/sacrificial, vice/vicious*.

Type mechánic/mechanícian. This correlative type implies the phonological alternation [ɪk/ɪšən]. For exs see 4. 44.

Type históric / histórificism / historícity. If a word in *-ic* forms derivatives in *-ism -ist, ize-* (without stress shift), *ⱡity* (with shifted stress), the alternations [ɪk/ɪsɪzm, ɪsɪst, ɪsɪtɪ-] are involved. Exs are *attic/atticism, atticist, atticize, historic/historicism, historicist, historicity, aesthetic/aestheticism*. The change occurs also with derivatives from *-ac*: *Syriacize* (Toynbee) f. *Syriac. Catholic, catholicism, catholicity* shows an isolated stress pattern. The preceding phonological alternations have derivative value.

4. 1. 28. As for the other vowel changes involved, the following tendencies are observed. The full stressed vowel of the initial syllable in the radical is

retained when it receives a middle stress in the derivative. Exs are: *pátriarch/ pàtriárchal, pólitics/pòlitícian, éditor/èditórial, sécretary/sècretárial, mánager/ mànagérial, ínstrument/ìnstruméntal, álderman/àldermánic, aúthorize/aùthorizátion*.

The stressed vowel of the radical stands in the syllable immediately preceding the full stress in the derivative i.e. has weak stress. A distinction has to be made between vowels in closed and in open syllables.

Short full vowels in open syllables change the vowel to [ə]: *hábit/habítual, válid/ valídity, ácid/acídity, plácid/placídity*, sb *áffix*/vb *affíx*, sb *próduce*/vb *prodúce*; [ɪ] is retained: *lívid/livídity*; [ɛ] is changed to [ɪ]: sb *rébel*/vb *rebél*, sb *récord/* vb *recórd*, sb *présent*/vb *presént, édit/edítion, tépid/tepídity, trépid/trepídity*.

Short vowels in closed syllables tend to be retained, with the exception of [ʊ]: adj *ábsent*/vb *absént, táctics/tactícian*, sb *áccent*/vb *accént* // sb *éxcerpt*/vb *excérpt*, sb *éxport*/vb *expórt*, sb *éscort*/vb *escórt* // *públic/publícity, rústic/ rustícity* (but sb *súbject* [ʌ] against vb *subject* [ə]; perh. because only prf *sub-* has the full vowel?) // [ʊ] is changed to [ə]: *cómplex/compléxity*, sb *cónfine*/vb *confíne*, sb *cónvict*/vb *convíct*.

Some long vowels are retained in quality and quantity; others are shortened, though no fixed rule seems possible: [ɔ] tends to be retained: sb *aúgment*/vb *augmént*, sb *tórment*/vb *tormént*, *caúsal/causálity* // [i] tends to be shortened: *équal/equálity, légal/legálity*, adj *fréquent*/vb *frequént*, sb *régress*/vb *regréss* // [ɑ] tends to be retained: *ártist/artístic, bárbarous/barbárity, sárcasm/sarcástic* // [ɜ] is regularly shortened: sb *pérmit*/vb *permít*, sb *pérfume*/vb *perfúme*, sb *férment*/vb *fermént* // [u] tends to be retained: *brútal/brutálity, neútral/neutrálity, rheúmatism/rheumátic*.

Diphthongs vary: [o] is retained with a glide by some speakers, reduced by others in *tónal/tonálity, tótal/totálity, vócal/vocálic*, but the alternation [o/ə] has morphological value in sb *prógress*/vb *progréss*, sb *prótest*/vb *protést*. [aɪ] is always retained in *fínal/finálity*, but in other cases it may also alternate with [ɪ], as in *mínor/minórity, cíte/citátion* // [e] tends to be reduced to [ə]: *ágent/agéntial, fátal/fatálity, sáline/salínity, májor/majórity*.

4. 1. 29. The full stressed, non-initial vowel of the radical comes to stand in weak stressed syllable before the main stress of the derivative. Short vowels in an open syllable are reduced to [ə]: *Japán/Japanése, mechánic/mechanícian, mathemátics/mathematícian* // *histório/historícity, atómic/atomícity*.

Short vowels are retained when standing in closed syllable: *eléctric/electrícity, eccéntric/eccentrícity, augmént/augmentátion, dialéctics/dialectícian* // *elástic/ elastícity, retráct/retractátion*.

Long vowels tend to be shortened: *transfér/transfereé, refér/refereé* // *restóre/ restorátion, adóre/adorátion* // *retárd/retardátion* // *extérnal/externálity*. But cp. *advántage* with [æ] and *advantágeous* with [ə].

Diphthongs are reduced: [aɪ] alternates with [ɪ], as in *respíre/respirátion, admíre/admirátion*.

If a full stressed vowel of the radical receives middle stress in the derivative, it is not changed: *restórable/restòrabílity* // *supérior/supèriórity* // *extérminate/ extèrminátion* // *compátible/compàtibílity, inflámmable/inflàmmabílity, spectácular/spectàculárity*.

4. 1. 30. If the middle or weak stressed vowel of one of the syllables after the main stress takes the main stress in the derivative, it is raised in volume. In most of all cases this concerns [ə] which may be raised to various vowels, the choice of which is often (esp. with proper names) merely dictated by the spelling: *superior/superiórity* [ə/ɒ], *similar/similárity*, *mental/mentálity* [ə/æ], *ceremony/ceremónial*, *ceremony/ceremónious*, *Milton/Miltónian* [ə/o], *censor/ censórious*, *senator/senatórial* [ə/ɔ], *Milton/Miltónic* [ə/ɒ], *agent/agéntial*, *element/ eleméntal*, *eleméntary* [ə/ɛ], *secretary/secretárial* [ə/ɛ], [ɛ/e] [ɛ/ɛ], *minister/ministérial*, *manager/managérial*, *Spenser/Spensérian* [ə/ir], *Galsworthy/Galswórthian* [ə/ɜ], *ammoniac/ammoníacal* [ɪ/aɪ], *Shaw/Shavian* [ɔ/e], *Marlowe/Marlovian* [o/ov]. The pair *anthracite/anthracitic* aɪt/ɪtɪk represents the regular derivative alternation while no diphthong is changed in pairs of the type *alkaloid/alkaloidal*.

4. 1. 31. Vowels which are weakly stressed in the radical as well as in the derivative are retained: *mathemátics/mathematician*, *mánager/managérial*, *supérior/superiórity*, *locáte/locátion* BE.

If, however, the vowel [ə] in an initial syllable (where it is always weakly stressed) receives middle stress in the derivative, it is raised to a fuller vowel: *atomic/àtomícity*, *advantage/àdvantágeous*, *statistics/stàtistícian*, *Japan/Jàpanése* have the alternation [ə/æ]. Short [ɪ] is sometimes lowered to [ɛ], as in *respire/ rèspiration*, *restore/rèstoration*, *mechanics/mèchanician*, *refer/rèferee*, sometimes raised to [i], as in *retard/rètardation*, *retentive/rètentivity*, *retract/rètraction*.

On the other hand, a diphthong which has middle stress in the radical may be reduced in the derivative if the syllable in which it stands is only weakly stressed. Alternation of [aɪ/ɪ] occurs beside that of [aɪ/aɪ] in pairs of the type *civilìze/civilization*. Cf. also the type *edifỳ/edification*.

Word-formation on a native basis of coining

4. 1. 32. All native suffixes and many suffixes of foreign origin are tacked on to the English word without any phonologic changes modifying the derivative as against the basis. In present-day English, the final sounds of the basis are not changed, regardless whether the suffix begins with a vowel or a consonant. Hiatus is not avoided, as is illustrated by such derivatives as *suable, drayage, withdrawal, Garboesque, boyish, truism, cityite, showy.*

With speakers who do not pronounce final [r, ɹ] after a long stressed vowel (*beer, bear, bar, boar, burr, boor*) or after an unstressed [ə] ([ə] cannot occur in a stressed position), as in *author, water*, [r] nevertheless appears in the derivative when the suffix begins with a vowel: *beery, bearish, boarish, burry, boorish, authoress, watery.*

Derivation from disyllabic words ending in [l] shows two patterns when the suffix begins with a vowel. 1) final syllabic [ḷ] loses its syllabic character in the derivative, as in *angle/angler, haggle/haggler, nibble/nibbling, sample/ sampler, shuffle/shuffler, peddle/peddler, tattle/tattler, tickle/ticklish, sizzle/siz-zling, bustle/bustling.* 2) syllabic [ḷ] remains syllabic in the derivative. The type applies when [ḷ] is preceded by [r], [n], [v], [tš], [dž], or a vowel, as in *quarrel/ quarreling, travel/traveler, funnel/funneling, hatchel/hatcheling, cudgel/cudgeling, jewel/jeweler.*

Latin-coined words in *-al* fall into this latter group, not dropping the vowel in the derivative. To put it more correctly, such words do not end in a syllabic [l̩] but in biphonemic [əl]. Cp. *nibble/nibbler* and *herbal/herbalist, haggle/haggler* and *legal/legalist*. In suffixal derivation involving stress this vowel alternates with [æ]. In part it is probably the spelling that is responsible for the alternations. Spelling appears to account for other alternations, too. Cp. *peddle/peddler, pedlar* and *pedal/pedaler, pedaling; gamble/gambling* and *gambol/gamboling*. Unless we invoke the same principle of explanation, it will be difficult to tell why different types of alternation hold for *drizzle/drizzling* and *chisel/chiseling*. It might not even be wrong to assume that the whole group deviating from pattern 1) owes its type of alternation to spelling.

4. 1. 33.   We have another instance of change at the end of the root in Latin-coined *damnation, damnable, condemnation, condemnable* as against *damn, condemn* where the final *n* of the cluster *mn* has been dropped in accordance with the rules of phonetic development. But the native sfs *-er, -ing* derive on the homologic pattern just described: *condemner* [kəndɛmə(r)], *condemning* [dɛmiŋ].

With the sfs *-ure* and *-ier* we have consonantal alternation between [s] and [š], [z] and [ž] (see 4.30.18 and 4.77.5). Other changes in the radical are found with sfs which have for centuries ceased to be productive, as *-ier* (*coal/collier*), *-ern* (*south/southern*). They are derivationally not relevant to the structure of PE.

In OE the sfs *-en* (*gold/gylden*, see 4. 27. 2), *-ish* (*Welsh*, OE *Welisc* f. *Walh*, see 4. 50. 1) involved vowel mutation. By the ME period the vowels of the derivatives had all become homologically refashioned after the radicals. Ablaut as a derivative principle with the so-called gradation nouns (*rād/ridan, bora/beran*) was already dead in OE.

4. 1. 34.   Derivation does not involve phonological changes of voice in PE as it did in former stages of the language. Up to EMoE phonological opposition of voiceless and voiced fricative was a derivative element, relevant to the distinction between nouns and verbs. This was originally a merely mechanical development: OE and ME final fricatives were voiceless versus voiced fricatives in medial position[1]. The first case occurred with uninflected noun forms (*hūs, lūs, wif, cnif* etc.), the second with inflected noun forms (this case is relevant to accidence, not to word-formation) and denominal derivatives, i.e. verbs or nominal derivatives containing a suffix.

The older stage of relevant phonological opposition is illustrated by *advice* 1297 (= OF *avis*) / *advise* 1297 (= OF *aviser*), *close* 1325 / *close* 1205, *device* 1290 (OF *devis*) / *devise* 1300 (OF *deviser*), *diffuse* 1526, obviously the unvoiced vb / *diffuse* 1400, *excuse* 1374, voiced in French, unvoiced in contrast to the vb / *excuse* 1225, *grease* 1290 / *grease* 1380, voiced in contrast to the sb from which' it is derived, *house* OE / *house* OE, *louse* OE / *louse* 1440, voiced in contrast to the sb from which it is derived, *mouse* OE / *mouse* 1250, voiced in contrast, *use* 1225 (OF *us*) / *use* 1240 (OF *user*).

belief, OE *bilēafe* becomes *beleeve*, unvoiced in 16th c. in contrast to the vb / *believe* 1200, f. OE *liefan, calf* OE / *calve* OE, *grief* 1225 (OF *grief*) / *grieve* 1225

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[1] For the historical aspect of the question see O. Jespersen, Linguistica, Copenhagen 1933, 346ff. (Voiced and voiceless fricatives in English).

(OF *grever*), *half* OE | *halve* 1300, *proof* 1225 (prob. the unvoiced derivative from the vb) | *prove* 1175 (OF *prover*), *safe* 1297 (OF *sauf*) | *save* 1250 (OF *sauver*), *sheaf* OE | *sheave* 1579, *shelf* 'bookshelf' 1386 | *shelve* 1598, *strife* 1225 (OF *estrif*) | *strive* 1225 (OF *estriver*), *thief* OE | *thieve* OE, *wife* OE | *wive* OE, *wolf* OE | *wolve* 1702, is prob. older as *wolver* is rec. 1593.

mouth OE | *mouth* 1300, *teeth* OE (pl. *tēþ*) | *teethe* 1410, *sheath* OE | *sheathe* 1400.

The following is a list of nominal derivatives having a suffix: *leavy* 1420, obs. *wolvish* 1430—1817, *thievish* 1450 (or f. vb *thieve*), obs. *wivish* 1535—1664, *elvish* 1340, *wively, wiveless, liveless*, all occas. in EMoE, *hooved* 1513, *leaved* 1250, obs. *leaveless* 1581—1638, *wivehood*, occas. in EMoE, *thievedom*, occas. in EMoE | *mouthed* 13.., *mouthy* 1589 (or f. the vb), *northern* OE, *worthy* 1250 || *lousy* 1377 (or f. the vb), *greasy* 1514 (two pronunciations), *greaser* 1641 (two pron.).

The oppositional type seems to be productive till about 1600, as the foregoing exs show. There is a modern *knive* 1850, but the usual word is *knife*.

4. 1. 35. The PE types are k n i f e vb f. k n i f e sb, w o l f i s h f. w o l f. Derivation of this kind must have set in about 1400 if we consider that *tooth* 1410 has a voiceless fricative (though chiefly occurring in form *toothing* where the fricative is medial) while *teethe*, rec. also 1410, has the voiced fricative. Exs of denominal vbs are *grass* 1460, *price* 1490 (the deverbal sb *rise* 1410 has a voiced fricative, which also seems to point out the existence of the new derivational type about 1400) and the deverbal sb *close* is rec. even somewhat earlier (1399) | *deaf* 1460, *sheaf* 1506, *scurf* 1599, *hoof* (*it*) 1641, *knife, life, shelf, staff, beef, brief, wolf* (all 19th c.) | *tooth* 1460, *unearth* 1450, *sleuth* vb 1905.

Suffixal derivatives are *mousy* dim. 1693, adj 1812, *mousery* 1888 | *scurfy* 1483, *leafy* 1552, *shelfy* 1576 'full of sandbanks' | *frothy* 1533, *breathy* 1528, *earthy* 1555, *lengthy* 1759 || *leafed* 1552, *hoofed* 1607 | *toothed* 13.., *sheathed* 1664 || *wifeless, lifeless* (OE), *leafless* 1590 || *wifely* (OE) || *wolfish* 1570, *elfish* 1542, *dwarfish* 1573, *deafish* 1611, *selfish* 1640, *wifish* 1773 || *lifer* 1830 || *mouther* 'blow on the mouth' 1814 || *wifie* 1841 | *selfism* 1823 | *mouthing* 'entrance to a mine' 1883 | *deafen* 1597, *strengthen* 14th c., *lengthen* 1520[1].

4. 1. 36. The invasion of French, Latin, and Greek words did not oust the native suffixes as it did the prefixes. It has exercised a restricting, modifying influence only. The suffixes *-ly, -some, -dom, -hood, -ship*, for instance, do not have the derivative range the corresponding German suffixes have. On the other hand, such a suffix as OE *-bǣre*, the counterpart of G *-bar*, had died out by the Middle English period, for reasons not connected with the Norman Conquest.

4. 1. 37. Suffixes may be 'synonymous' in the same way as full words are, viz. they partially overlap semantically. As far as *New Yorker, Chicagoan, Manhattanite, Viennese* are concerned, the four suffixes represent the same

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[1] The sfs *-hood* and *-ship* are not dead, as is wrongly asserted in F. Mossé, Esquisse d'une histoire de la langue anglaise, p. 95.

concept 'inhabitant of . . .' (for a parallel case of inflectional endings compare
L *amic-i, reg-is, exercit-us*). They are what American linguists call alternants
while Bally speaks of suppletion. However, each one suffix has a different
totality of semantic features. No two combine alike formally or with the same
intellectual or emotional connotation, though in particular cases two types
are very nearly interchangeable (cf. the suffixal extensions *-ableness* and
-ability, 4. 55. 4). But the fact remains that interchangeability applies only
to certain pairs, i.e. it is never more than partial. Any one sign is determined
by the totality of combinations in which it may occur and which cannot be
the same as that of another sign.

4. 1. 38.   The difference between a prefix and a suffix is that a prefix is an
extinct first-word while a suffix is an extinct second-word, historically speaking.
As the first element of a combination is not the grammatically dominant part,
the prefix can only modify the word to which it is affixed without having any
hold on its grammatical position. A prefixal derivative joins the category the
unprefixed word belongs to. In a suffixal derivative, however, the suffix is the
grammatically dominant part. In most cases, it is also the semantically
dominant element and the determinatum of the syntagma. In combinations
such as *father-hood, father-ly*, the word *father* merely determines what is es-
sentially a '*-hood*' or '*-ly*' respectively. There is, however, a certain category
of suffixal syntagmas where the relationship is reversed. Combinations based
on the underlying theme of appreciation stand out as exceptions. Types of
this kind are substantives with a diminutive (endearing) or pejorative suffix
(*daddy, boykin, booklet, squireling*), adjectives with an approximative suffix
(*yellowish, bluey*), verbs with a diminutive or frequentative suffix (*patter,
crackle*). Semantically speaking, a *daddy* is still basically a *dad*, a *booklet* still
a *book*, a *squireling* a *squire*. The quality of *yellow* is only restricted in *yellowish*,
and *crackle* merely refers to a series of *crack* noises. These are therefore cases
of syntagmas in which the determinatum precedes the determinant. With
compounds we have a similar case in appositional combinations such as
fisherman, messenger boy where the first element dominates semantically.

The preceding cases of a suffix determining the radical help to explain how
sometimes prefixes (which are determinants by nature) and suffixes express
similar ideas. There is apparently no great difference between the types
yellowish and *unhappy* as both affixes have determinant character. Cf. also
L *permagnus* 'very great' and E *greatish* 'somewhat great', L *florescere* and G
erblühen (both denoting incipient action or incipient change of state). These
observations do not, however, invalidate the general principle that a prefix is
the determinant of a syntagma whereas a suffix is the determinatum. Cf.
3. 1. 15.

4. 2. 1.   -able /əbļ/

English owes this suffix to Old French from which it borrowed words such
as *agreeable, comfortable, blamable, comparable, desirable, measurable, damn-
able, deceivable, profitable. changeable, favorable, passable, serviceable, reason-
able, acceptable, commendable, determinable*, all ME.

As we see, all these loans could be analysed as English derivatives also, since the basis without *-able* existed either as a substantive (*measure, service, reason*), or as a verb (*accept, agree, change, commend, deceive, desire, pass*), or might be both (as in *comfort, profit, favor*). Thus the type looked both denominal and deverbal. To this morphological dualism was added a semantic one: the words with verbal bases had partly an active, partly a passive sense, 'fit for doing' or 'fit for being done'. Active were *durable, variable, agreeable, comfortable, deceivable*, passive *acceptable, blamable, commendable, comparable, desirable*, both meanings we have in *passable* and *changeable*. All these functions of *-able* English inherited from French which had itself found them in Latin. English has formed new words on the basis just described.

4. 2. 2.   Deverbal derivatives have always been more frequent than denominal ones. The early deverbal adjectives in *-able* have sometimes an active meaning (see below), but the general tendency has been to coin words with a passive meaning. This is probably due to the predominantly passive character of the loans from French and Latin. Cf. e.g. *allowable* (in obs. sense 'laudable'), *innominable* arch., *innumerable, tolerable*, all ME, *revocable* 1471, *memorable* 1483, *navigable* 1527, *admirable* 1596 (the stress shows that the word is not derived from *admire* v.; the same with *revocable*, the derivative equivalent of which is *revókable* 1584).

4. 2. 3.   English derivatives occur from the 14th c. on, almost simultaneously with the afflux of loans. From the very beginning, the suffix is tacked on to French as well as native roots. It was perhaps associated with the (unrelated) word *able*, its early use with native stems is otherwise not easily accounted for. Only *-age* and, to a lesser extent, *-ard* were so easily combined with native words.
    Exs.: Understandable (Wycliffe), *believable* 1382, *eatable* 1483, *available* 1451, *determinable* 1458 H, *appeasable* 1549, *readable* 1570, *alterable* 1574, *approachable* 1571, *controllable* c 1576, *countable* 1581 H, *accountable* c 1583, *conquerable* c 1599, *drinkable* 1611, *achievable* c 1630, *advisable* 1647, *appealable* 1622, *attainable* 1647, *breathable* 1731, *writable* 1782, *adaptable* 1800, *attackable* 1813, *classifiable* 1846, *copyrightable* 1903.

4. 2. 4.   Right from the beginning we have numerous coinages prefixed with *un-* which are very often much earlier than their positive counterparts. I give some examples, the dates in parentheses being those of the unprefixed words: *unspeakable* c 1400 (1483), *unknowable* 1374 (1449), *unthinkable* 1430 (1854), *unamendable* c 1450 (1589), *unbearable* 1449 (1550), *unbreakable* 1480 (1570), *unaccusable* 1582 (c 1646), *unavoidable* 1577 (c 1638), *unclimbable* 1533 (c 1611), *unconsumable* 1571 (1641).

4. 2. 5.   Beginning with the 16th c., *-able* is used with postpositional vbs, either with the sf tacked on to the phrase, as in *come-at-able, uncome-at-able, get-able, unget-at-able*, or with the sf put between vb and postposition, as in *liveable-with, liveable-in, unspeakable-to, unget-on-able-with* (a combination of the two preceding types). But usually the particle is dropped. This is the type which usage appears definitely to have decided upon. Exs are *reliable, dependable, available, dispensable, laughable, livable, unaccountable, unspeakable, unswimmable, drivable* (as a road).

4. 2. 6.   As we have seen, some loans from French had an active meaning ('able to do' etc.). In English we have a few coinages of this type: *suitable* 1582 (following *agreeable*) and *speakable* 1483—1676; it may, however, have helped to bring about *answerable* 1548 'responsible' (in the sense 'able to be answered' the word is more recent (1697) and rarely used). *Alterable* 1526 H 'which changes' (obs.) was coined after *changeable, variable*. Some other verbs of the move and change class which have no object followed: *decayable* 1617, *perishable* 1611, *unshrinkable* 1885.

4. 2. 7.   Denominal derivatives have never been frequent. The pattern existed through loans from French, such as ME *reasonable, customable* 'customary, habitual', *measurable* 'moderate' (as a deverbal coining with a passive sense it is first quoted in 1599), *profitable, honorable, charitable, proportionable, comfortable, favorable, serviceable* which all had the basic meaning 'characterized by . . ., showing . . . in a specific manner'. English coined *treasonable* 1375, *seasonable* 1380, *meritable* 1415, *personable* c 1430, *available* 1502 'effectual' (after *profitable*), *leisurable* 1540, *actionable* 1591, *fashionable* 1606 (*unfashionable* 1563), *siz(e)able* 1613. *Reasonable* may have given rise to *knowledgeable* 1831 ('one who shows reason', 'one who shows knowledge'). *Companionable* 1627/77 follows *personable*, replacing *companable* c 1340—1611 and *companiable* c 1326—1822, both repr. OF *compaignable*. *Customable* developed the meaning 'liable to duty' 1529 H, which gave rise to *dutiable* 1774 with the same meaning. The loan word *honorable* ME 'worthy of honor' attracted *creditable* 1659, *respectable* 1586, *reputable* 1611. The now rare words *conscionable* 1549 'accordant with good conscience, just' and *unconscionable* 1565 must be based on a substantive **conscion*, as *conscioned* 1541—1627 and *conscionless* 1607—1617 show. It is supposed that the word, in the 15th and 16th c., was formed as a "singular" of *conscience* which was perhaps considered to be a plural, as the occasional spellings *consions* or *conchons* seem to suggest. This is the opinion of the OED (based on F. Gall, On English Adjectives in *-able*, London 1877). In this case *conscion-able* also would be parallel to *reason-able*. *Pleasurable* 1579 joins the group *comfortable, favorable, serviceable* with which it forms a semantic family. The word *lovable* c 1340 which the OED explains from the verb *love* probably falls under the same semantic heading as the preceding group. It is derived from the sb *love*, as *comfortable* seems to be from sb *comfort*. Cp. the first quotation from Hampole (c 1340): *Ihesu, deserabill es thi name lufabyll and comfortabyll*. It renders L *amabilis* (cp. 1483 Cath. Angl. 222/2 *Lufabylle* . . .; *amabilis*, q. OED s.v. *lovable*). ME *paysyble* (f. OF *paisible*) which semantically also fitted the group was in the 16th c. refashioned into *peace-able*.

4. 2. 8.   Denominal derivatives with a "passive" meaning are *saleable* 1530, *razorable* (Sh), *palatable* 1669, *objectionable* 1781, *clubbable* 1783, *carriageable* 1813, *marriageable* 1555, *marketable* 1600, *magazinable* 'suitable for printing in a magazine' 1906 DA.

4. 2. 9.   Suffixation with *-able* involves no phonologic changes as compared with the basis. This applies also to the great majority of original loans insofar as they are now analysable as English derivatives. Exceptional is *damnable* (OF, L) which has preserved its [n] as against *damn*.

4. 2. 10.   With Latin-coined verbs in -ate the usual derivative alternation is -ate/-able: cultivate/cultivable, demonstrate/demonstrable, educate/uneducable, irritate/irritable, isolate/isolable, formulate/formulable, negotiate/negotiable, navigate/navigable, separate/separable, repatriate/repatriable.

However, the alternation -ate/-atable (marking a shift from wffb to wfnb) is also found: create/creatable (1678) 1848, implicate/implicatable, narrate/narratable 1852, irrigate/irrigatable 1836 DA (= irrigable), educate/educatable 1868 DA, cultivate/cultivatable 1847.

4. 2. 11.   -ible is a spelling variant of -able, used to anglicize actual or possible Latin words in -ibilis. Perfectible 1635 is such a word. A Latin perfectibilis does not seem to exist, but if Latin had formed a derivative from perficere, it would have taken that form. English coinages in -ible after the Latin fashion are not frequent. They go together with the real borrowing of French words in -ible or Latin ones in -ibilis (audible, conversible, convertible, corruptible, credible, discernible, divisible, fallible, visible etc.). To this latinizing trend we owe eligible 1561 (if it is not F éligible), discerptible 1736. Invertible 1881 'that can be inverted' or 'that tends to invert the usual order' is formed after convertible ME; derisible 1657 after risible 1557 (= LL risibilis), reversible 1648 after conversible 1660 (= LL conversibilis) and perhaps some others. The type is rare.

Note: forcible ME is OF forcible.

4. 3. 1.   -acy /əsɪ/ (type pirate/piracy)

is a suffix due to Medieval Latin and Old French. It corresponds to ML -acia resp. OF -acie (another spelling is -atia, whence the OF doublet -atie). The first words came into English in the 14th c. when classical Latin did not yet play the role it assumed later. I mention this because some of the Medieval Latin words in -acia had ended in -atio in Classical Latin, e.g. ML procuratia and obstinatia. For others no such change is quoted in Du Cange (I have used the edition of 1733). No *conspiracia is recorded, but OF conspiracie suggests its existence. It seems that there was a tendency to substitute ML -atia for CL -atio. Anglo-French has confederacie which can only go back to *confederacia (CL confederatio). Our assumption will also account for E lunacy 1541. This word cannot be derived from lunatic ME as the OED explains it. On what type should the formation be based? The sf -atic never leads to -acy. Lunacy probably represents a non-attested *lunacia for regular ML lunatio 'menstruus lunae cursus' Du Cange; that kind of insanity was considered to be connected with the course and the changes of the moon). Lunatic is a separate loan = ML lunaticus. Jespersen's explanation that lunacy is f. lunatic on the analogy of diplomacy/diplomatic is impossible (see 4. 3. 4).

4. 3. 2.   On principle, Old French words in -acie go back to Ancient or Medieval Latin words in -acia. We do not, however, find a Latin original for each Old French word. Du Cange has obstinatia, papatia, fallacia, efficacia, but no Old French counterparts of these words are quoted. They may have existed, though. English has drawn on both Old French and Medieval Latin. The results of this borrowing are: advocacy (OF and ML), conspiracy (OF, no ML), papacy (no OF, ML), prelacy (OF and ML), primacy (OF and ML), all ME.

Fallacy 1481 is L *fallacia, efficacy* 1527 L *efficacia*; no French parallels are recorded. After *primacy* was formed *supremacy* 1547 (F *suprématie* 1688 is a loan from English), after *papacy* the word *episcopacy* 1647.

4. 3. 3.   Apart from these few coinages English *-acy*, in the preceding group, is a mere termination in anglicized loans from Old French or Latin. It has, however, proved to be productive for derivation also. We see that some of the preceding loans are substantives denoting state or quality, sometimes also collectivity. These and the substantives or adjectives denoting the bearer of the quality or state, or the individual of the collectivity, very often formed phonetic pairs insofar as the former ended in *-acy* and the latter in *-ate*. Even in Medieval Latin and Old French we had pairs such as ML *advocatus/advocatia* resp. OF *avocat/avocacie*, ML *praelatus/praelatia* resp. OF *prelat/prelacie*, ML *obstinatus/obstinatia* resp. OF *obstinat/* (app. no OF). In Middle English we have the full pairs *prelate* 1205 / *prelacy* 1325, *advocate* 1340 / *advocacy* 1413, *obstinate* 1340 / *obstinacy* 1390, *confederate* 1387 / *confederacy* 1387. Hence the tendency arose to supply a word in *-acy* where the word in *-ate* existed, i.e. the tendency to derive sbs in *-acy* from sbs or adjs in *-ate*. Derivation was made from any word in *-ate* of Romance origin regardless of its morphological appurtenance. *Prelate* goes back to *praelatus* which is a participial adjective, morphologically belonging to the *o*-declension; to this group belong most of the words in *-ate*. But *magistratus* is a *u*-stem, and *pirate* goes back to *pirata*, an *a*-stem and Greek loan. The substantive in *-acy* denotes the state or quality of being what the basis in *-ate* implies. Sometimes also the derivative develops a collective meaning. Examples are:

delicacy 1374 (no French or Latin) fr. *delicate* 1374, *privacy* 1450 fr. *private* ME, *delegacy* 1533 fr. *delegate* ME, *piracy* 1552 fr. *pirate* ME (also ML *piratia*), *obduracy* 1597 fr. *obdurate* 1440, *effeminacy* 1602 fr. *effeminate* ME, *intricacy* 1602 fr. *intricate* 1470, *subordinacy* 1627 fr. *subordinate* 1456, *intimacy* 1641 fr. *intimate* 1632, *illiteracy* 1660 fr. *illiterate* 1556, *accuracy* 1662 fr. *accurate* 1612, *degeneracy* 1664 fr. *degenerate* 1545, *curacy* 1682 fr. *curate* ME, *inveteracy* 1691 fr. *inveterate* ME, *legitimacy* 1691 fr. *legitimate* 1494, *profligacy* 1738 fr. *profligate* 1535; *immaculacy* 1799, *complicacy* 1827, *testacy* 1864, *ultimacy* 1842, *inviolacy* 1846. *Retiracy* 1842 'retirement, privacy' (U.S.) is formed fr. *retire* after *privacy*.

4. 3. 4.   The correlation *-ate/-acy* is valid only for *-ate* words, pronounced [ıt] or [et] (i.e. chiefly words in which the sf historically represents L *-atus*). Cases of *-at* [æt] (which have another origin, historically speaking) are not relevant. The non-homological stress pattern of démocrat/demócracy, áristocrat/aristócracy, plútocrat/plutócracy, díplomat/diplómacy goes to show that these pairs were not formed after, or have not entered the correlative type under discussion. They are also different historically. *Aristocracy* 1561 and *democracy* 1574, ultimately OGr words, came into English through the medium of French (like the corresponding adjs *aristocratic* 1602, *democratic* 1602). From the adjs were back-derived in French the sbs *aristocrate* and *démocrate* as terms of the French Revolution, and then adopted into English. On the analogy of *aristocracy/aristocrat, democracy/democrat* have been derived *diplomat* 1813 fr. *diplomacy* 1796, *plutocrat* 1850 fr. *plutocracy* 1652.

4. 4. 1. -age /ɪdž/[1]

is a sf with impersonal denominal and deverbal sbs. The morpheme came into the language through loans from French (beg. with the 13th c., see Gadde 50/51). In Old French the sf -age (fr. L -āticum) formed denominal and deverbal derivatives, and the majority of meanings we observe with E -age are inherited from French. The suffixal type was very strong in Old French and Anglo-Norman and exercised a great influence on Medieval Latin insofar as it gave rise to many ML words in -agium, as barbicanagium, carrucagium, chiminagium, pondagium, partagium, scutagium, surplusagium, wharuagium 'wharfage' a.o. These words belong chiefly to the sense group 'right, liberty, toll'. Several of the English words listed below were for a long time quoted in Latin form only, as stowagium 'stowage', thanagium 'thanage' a.o.

4. 4. 2.
Derivatives from personal sbs have the meaning 'condition, state, rank, office of . . .', also 'collectivity of . . .'. Exs of loans are baronage, bondage, parsonage, vassalage, thanage (1200 in L form thanagium). An early Ec is barnage 'infancy' 1325 now obs. From the 15th c. are recorded brokerage, peerage, umpirage. Later are baronetage, brigandage, butlerage, clientage, companionage, knightage, matronage, orphanage, peonage, pupilage, squir(e)age, tutelage (f. obs. tutele in same meaning), tutorage, the recent AE readerage 'collectivity of readers'. In baronage, baronetage, companionage, knightage, peerage, squier(e)age we have the additional meaning 'list of . . .'.

4. 4. 3.
The analogy of hermitage 'abode of a hermit' (= OF) attracted parsonage 1472 H, vicarage 1530 H, anchorage 1593, cooperage 1714, orphanage 1865 H, the recent AE teacherage (ASp Oct. 1936, but the word is hardly current).

With derivatives from non-personal sbs we find the sense 'collectivity', material as in baggage 1430 (= OF) and later cellarage, flowerage, freightage, fruitage, frontage, gunnage, harborage, lairage, leafage, leverage, oarage, pipage, scaffoldage, spindleage (1921), tentage, tankage, trackage AE 'tracks of a railway', vaultage, immaterial in surplusage 1407 (ML surplusagium) and later percentage, rentage, wordage. As for the notion 'place', the word cottage ME belongs in the group as well as village ME though it is doubtful whether the words have ever been felt to be connected with cot resp. vill. After bag and baggage, Sh coined scrip and scrippage.

4. 4. 4.
A variant of the 'collectivity' type is the t. mileage, forming words denoting the total of measure units. There is no French pattern, on the contrary, French has partly imitated this English type (F tonnage 1793 and voltage 19th c. are prob. loans). Coinages are 18th c. and later, as acreage, footage, poundage, tonnage, voltage, yardage.

4. 4. 5.
Many OF words had the meaning 'liberty, privilege' or 'toll, duty' connected with the privilege. We have already pointed out that many of these words occur also in Medieval Latin as words in -agium. Loans are fullage,

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[1] F. Gadde, On the history and use of the suffixes -ery (-ry), -age and -ment in English. Lund diss. 1910 (esp. 50—69).

pavage, portage, but the type became early established. Ecs are p o u n d a g e
'tax . . . per pound' 1399 (yielding Anglo-Latin *pondagium*), obs. *groundage*
1440, *cranage* 1481, *butlerage* 1491, *keelage* 1500. In later coinages we cannot
always distinguish between denominal and deverbal derivation, the general
sense being 'charge, fee connected with . . .'. Exs are *anchorage, bailage, bea-
conage, brokerage, cartage, corkage, drayage, expressage, haulage, havenage,
housage, moorage, porterage, postage, poundage* (f. vb *pound* 'impound cattle'),
pilotage, quarterage, quayage, standage, storage, tankage, wharfage, yardage.

4. 4. 6.   Occasionally other senses occur, as in *leverage, oarage, porterage*
'action, power of . . .', *postage, telpherage* 'conveyance by . . .', *windage,* a
technical term, meaning 'deflection caused by the wind' etc., *gunnage* in sense
'money distributed among the captors of a ship according to the number of
guns', *problemage* 1928 'state of being a problem'.

4. 4. 7.   ME borrowings from OF are such word pairs as *arrivage/arrive,
carriage/carry, coinage/coin* on the analogy of which were formed other de-
verbal impersonal sbs, from foreign as well as native stems. Originally, we
find only derivatives with the sense 'act, fact, mode of . . .' which was the
one French has chiefly developed. Exs are s t o w a g e 1352 (orig. in L form
stowagium), *cartage* 1428, *ferriage* 1450, *steerage* 1450, *stoppage* 1465, obs.
mockage 1470 (common in 16th and 17th c.), *leakage* 1490. Later are recorded
anchorage, corkage, drainage, driftage, dosage, dotage (which attracted joc.
anecdotage and *sacerdotage*), *flowerage, fosterage, fruitage, floatage, moorage,
pipage, plunderage, pondage, siphonage, storage, tannage, trackage. Package*
1611, too, had first the meaning 'act, fact, privilege of packing'.

4. 4. 8.   The meaning 'place of . . .' has developed with such words as a n -
c h o r a g e, *moorage, bearthage, standage* 'stall' (obs.), 'underground reservoir
for water', *storage.* Other concrete senses show *floatage* 'that which floats',
luggage, orig. 'that which is lugged about', *package, brewage.* An unusual sense
underlies the mining term *leadage* 'distance that coal has to be conveyed from
the mine to a sea-board or railway'.

4. 4. 9.   Very frequent is the meaning 'result of . . .', as in s w e e p a g e 1628
and later *breakage, coverage, driftage, flowerage, seepage, shrinkage, slippage,
spillage, soakage, spoilage, tankage, wastage, wreckage* a.o. *Sewage* is influenced
by *drainage,* formed as if from a vb *sew* from which *sewer* was derived. But there
is also the normally derived word *sewerage.*

4. 4. 10.   Most words belong to several sense groups, and many derivatives
are at the same time denominal and deverbal (*anchorage, flowerage, pilotage,
pipage, postage, tankage* a.o.).
     Formatively isolated are r o u g h a g e 'rough or coarse substance' etc.,
shortage 'want, insufficiency' with the AE counterpart *overage,* a banking
term. *Viduage* 1832 is coined f. L *vidua.*

4. 4. 11.   Words such as *bandage, visage, voyage* are loans from French which
have no derivational connection with any English word. Words borrowed
from French in recent times are no longer incorporated in the suffix group.

Exs are *massage* 1876, *camouflage* 1917, *sabotage* 1910, pronounced [až]. In other cases, *-age* is a mere adaptational termination: *cabbage* for ME *caboche* (f. F *caboche*), *sausage* (f. ONF *saussiche*), *vintage* is AF *vintage* which is altered f. *vindage*, *vendage*, OF *vendange* = L *vindemia*. *Cartilage*, *image*, *putrilage* a.o. represent Latin words in *-ago* in their French form. *Scrimmage* has, of course, nothing to do with *scrim* 'canvas', but is corrupted from *scrimish*, *skirmish*.

4. 4. 12.   Derivatives in *-age* are outspoken technical terms in that they bear the mark of a special milieu, professional or otherwise, in which they were coined. This does not, however, prevent the words from having general currency. The 'result' group is especially common in this respect.

4. 5. 1.   -al /əl/ (type arrival)[1]

forms sbs of action chiefly from verbs of Latin or French origin. Neither the OED nor the grammars say anything convincing as to how *-al* became an English formative. The OED explains the rise of the sf on the analogy of OF *espousailles* and *bataille* which were adopted as *spousail* and *bataile*. E *bataile* does not, however, count as a pattern, as it had no verb to go with in English. E *spousail* 1300 could be analysed as a derivative from the older verb *spouse*. Other loans are *arrival* 1384 and *supposal* 1380, both accompanied by older verbs with which, therefore, derivational connection was naturally established. No OF or AF pattern appears to be recorded for *rehearsal* 1386, which may, however, be due to an incidental gap in our lexical material. The verb *rehearse* is older (1340). By 1400, *-al* was certainly an English formative, though some of the words recorded after 1400 have OF or AF counterparts and may therefore be considered loans (e.g. *acquittal*, *trial*, *refutal*, *reprisal*, *rental*).

4. 5. 2.   From the 15th c. are recorded *acquittal*, *refusal*, *reversal*, from the 16th c. *removal*, *reprieval*, *recital*, *requital*, *denial*, *trial*, *survival*, *remittal*, from the first half of the 17th c. *committal*, *reposal*, *disposal*, *proposal*, *refutal*, *revisal*, *receival*, *revival*, *renewal*, *restoral*, *approval*, *perusal*, *retiral*, *suppressal*, *surmisal*, *retrieval*, *deprival*, from the 18th c. *avowal*, *carousal*, *supplial* (now rare), from the 19th c. *appraisal* 1811 *dismissal*, *arousal*, *betrayal*, *demersal*, *transferral*.

From the end of the 18th c. on, derivatives from end-stressed native verbs also occur, as *bestowal* 1773, *withdrawal*, *indrawal* (no vb, formed after prec.), *upheaval*, *betrothal*, *beheadal*, *uprisal*, *uprootal* (19th c.). *Reappraisal*, *referral* and *deferral* (not in OED or Spl.), used in AE, seem to be recent.

4. 5. 3.   In contradistinction to *-ance* which is a derivative with durative verbs, the sf *-al* is tacked on to verbs implying a final result. There are a few exceptions, such as *rehearsal* (which is prob. no Ec), *recital* (formed after prec. in the same legal sense), *trial* (which is a loan from AF). That the verbs are end-stressed (Jespersen) is right, but does not seem to be the main point: *interfere*, *consist*, *guide*, *pursue* and others are also end-stressed, but derive sbs in *-ance*, *-ence*.

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[1] Y. Malkiel, Three Old French sources of the English 'arrival', 'withdrawal' type, JEGPh XLIII, 1944, 80—87. OF *-aille*, *-al*, *-ail* all become naturalized as *-al*.

4. 5. 4.   Strangely enough, English has borrowed from French words of a type which is otherwise scarcely made use of in French. The origin of F -aille is L -alia, as in carnalia, genitalia, inguinalia, Floralia, Lupercalia, Saturnalia. The form -alia is the plural of adjectival -ale, the neutral form of -alis (which is represented by adjectival -al in English), expressing plurality and collectivity. French derivatives are almost all denominal, instances of deverbal derivatives are rare in OF. It is, however, probable that the deverbal type was developed in AF. The earliest English words are all legal terms (rehearsal, acquittal, reprisal, reversal, refusal), and the terminology of Law was French.

Spousal understood as 'nuptial ceremony' attracted native bridal, which is by origin bride-ale. But 'bridal, with the stress and sense of ale quite suppressed, occurs before 1300' (OED). Burial ('singularized' from OE byrgels 'burying-place' is quoted in sense 'interment' for the year 1453, prob. under the influence of spousal and bridal (one might think of the influence of funeral, which is not, however, found before 1512).

4. 6. 1.   -al (⌐ial, ⌐ical, -oidal, -órial, ⌐ual) /əl/

English owes this suffix to Latin, Classical, Medieval and Modern, from which it has adopted innumerable words. The Latin form of the suffix is -alis.

In CL we find words such as autumnalis, hiemalis, finalis, mortalis, municipalis, muralis, naturalis, corporalis, manualis, natalis, gregalis, pastoralis, pontificalis, regalis, mensalis, navalis, parentalis, matronalis, virginalis, contubernalis. The meaning of the suffix is 'which is like, has the form of, the character of, is in the way or nature of . . .', then more loosely 'belonging to . . .'. The number of derivatives grew considerably in LL where we find filialis (after parentalis), criminalis, idealis, orientalis a.o. The suffix was also tacked on to Greek roots. To normalis, theatralis, which are already classical, came to be added baptismalis, astralis, hebdomadalis, patriarchalis a.o.

The anglicized form of L -alis is -al, which is found in countless words with a Latin or Greek basis.

Many of the present-day English words have never existed in Latin. It would therefore be an erroneous standpoint to be always looking for the Latin original or the French pattern of a word (which the OED often does). The existence of an actual pattern is irrelevant so long as, potentially, the coinage is Latin. Why should fœtal, fetal be F foetal, if there are words such as local, focal, which are also derived from -o stems. The words federal and eventual are said to represent F fédéral resp. éventuel (OED). Not only is this impossible because the French words are recorded much later than the English ones (E federal 1645, F fédéral 1792, E eventual 1612, F éventuel 1718), but the principle of assuming an actual original is wrong. The Latin stem is foeder- resp. eventu- with the same basis as in sider-al, later-al, tempor-al resp. sensu-al, spiritu-al, manu-al, gradu-al, which are older.

4. 6. 2.   To most English words we can attach the sf because the English word represents the Latin resp. Greek stem. Thus the process of coining is really on a native basis. Exs are accidental, incidental, actional, architectural, basal, cantonal, cataclysmal, catarrhal, causal, chasmal, commissural, conjectural, consonantal, continental, constitutional, institutional, creatural, cultural, dialectal,

diphthongal, monophthongal, documental, edictal, electoral, elemental, feudal, fictional, fractural, futural, global, herbal, hormonal, humoral, phantasmal, prefectural, procedural, protectoral, scribal, suicidal.

Latin-coined are such words as *balneal, cloistral* (see 4. 1. 13), *horizontal, societal* (see 4. 1. 13).

Derivation from a non-latinizing English basis is quite recent. Exs are *seasonal* 1838 (after words in *-ional*), *pivotal* 1844, *postal* 1843 (perh.? after F *postal* 1836), *creedal* 1879 (but note the frequent spelling *credal* after L *credo*), *coastal* 1883, *featural* 1883 (after other words in *-tural*), *environ-mental* 1887 (after other words in *-mental*). *Nounal* 1871 is hardly common. *Tribal* 1623 is now connected with *tribe*, but was perh. originally meant as a derivation from L *tribus* (the derivative *tribual* 1650 has not survived).

Derivation from native words is not common. *Tidal* 1807 (there is also *cotidal*) may have been influenced by *sideral, hundredal* 1862 'belonging to a territorial hundred (subdivision of a county)' is possibly influenced by *territorial*. There is also an old *burghal* 1591 f. *burgh*.

Non-committal 1851 is the sb *non-committal* 1836 used adjunctively (i.e. the *-al* of t. *arriv-al*).

4. 6. 3. In AL we have also derivatives in *-alis* from substantivized adjectives, such as *infernalis* fr. *inferna* 'the world below', *aequalis* fr. *aequum* 'the being equal'. Such extensions looked like derivatives from the adjectives *infernus* and *aequus*, and subsequently other extensions followed. Quintilian (II. 13. 14) forms *perpetualis* to render Gr *katholikos* 'general, universal', and in LL we find *vernalis*, extended fr. CL *vernus* (after *autumnalis, hibernalis*), *annualis* (CL *annuus*), *aeternalis, sempiternalis* (CL *aeternus, sempiternus*). The foregoing adjectives, as we see, all belong to the sphere of 'time'. Church influence adds the tinge of 'transitoriness' resp. 'eternity', hence LL *temporalis* and OF *temporel*. Following this line, Old French formed *celestial* (which English borrowed as *celestial* ME), and English, independently, continued with the counterpart *terrestrial* LME and the word *corporeal* 1610 (after *celestial, mortal* and others of the 'salvation' sphere). With the exception of *terrestrial* and *corporeal*, English has, in this semantic field, only loans from Latin or Old French. The following 'family' words are also loans: *paternal, maternal, fraternal* are ML *paternalis, maternalis, fraternalis* (for CL *paternus, maternus, fraternus*), coined after CL *parentalis* and LL *filialis* (which gave *parental* and *filial* in English).

4. 6. 4. English coinages are the extensions of Latin adjectives in *-torius* (a few in *-sorius*), derivatives from personal substantives in *-tor* (*-sor*). The type pictorial arises in the 16th, but is more freely used in the 18th and 19th c.: *praetorial* 1579, *censorial* 1592, *amatorial* 1603, *pictorial* 1646, *imperatorial* 1660, *dictatorial* 1701, *professorial* 1713, *senatorial* 1740, *tutorial* 1742, *propraetorial* 1885, *procuratorial* 1726, *gladiatorial* 1751 are either words which belong to Ancient Rome or have an academic ring of weightiness. Only a few of them seem devoid of this academic tinge, as *dictatorial, senatorial* which have acquired importance through the political events of our times. The analysis of words of this group is of course now *praetorial* f. *praetor* etc.

After such adaptations of Latin adjectives in *-orius*, English derived adjectives in *-ial* from other agent substantives in *-or*, as *visitorial, gressorial* (birds), *saltatorial* (insects), *volitorial* (birds), *conspiratorial, editorial, equa-*

torial, mediatorial, monitorial, proctorial, proprietorial, rectorial. After *editorial*
is coined *reportorial* (fr. *reporter*, 1858 DA), which sounds, however, rather
journalese.

If the sf *-ial* is tacked on to words in *-ent, -ence, -stance* which is only possible
when they represent actual or possible L words in *-ens, -entia, -stantia,* never
when the words are mere English suffixal derivatives, we get the derivative
alternation *-ent-/-éntial, -ence/-éntial, -ance/-ántial* = [s/šəl] resp. [t/šəl]. Exs
are *agent/agential, confident/confidential, president/presidential, provident/provi-
dential, prudent/prudential || difference/differential, reference/referential, exist-
ence/existential, essence/essential, residence/residential || circumstance/circum-
stantial, instance/instantial, substance/substantial.* The productivity of the type
appears from comparatively recent coinages such as *deferential* 1822, *preferen-
tial* 1849, *interferential* 1880, *transferential* 1889, derived from older words in
-ence. From *microbe* is derived *microbial* (besides less usual *microbal*).

After the pattern *minister/ministerial* (the latter is L *ministerialis*) *mana-
gerial* 1767 has been derived from *manager*.

4. 6. 5.   There are also derivatives in *-al* from personal sbs in *-tor*. But this
type, which is older, has only formed a few words: *rectoral* (only with reference
to God, in contradistinction to the profane *rectorial*), *protectoral* (a word
coined during the period of the Cromwells, possibly in imitation of *rectoral*).
Other words are *electoral* 1675 and *doctoral* 1563/87.

Congressional 1691, semantically belonging to *congress* (esp. the Congress
of the United States), is formed with the basis *congression* which was formerly
used as a variant of *congress*.

There is no Latin pattern in *-orius* for either of them. On the other hand,
-orial has been in favor with personal substantives since the 17th c., and the
preceding words received forms in *-orial* also: *electorial* 1790, *doctorial* 1729,
protectorial 1806 (perh. supported by LL *protectorius*). The common words
are, however, those in *-al* (cp. *electoral law*).

4. 6. 6.   The OED (s.v. *-orial*) gives the misleading explanation that "these adjs.
in *-orial* are usually identical with those in *-ory*, and the two forms are not rarely
found side by side (e.g. *piscatorial, piscatory*)". This does not seem to be quite
correct. First, there are not so many instances of pairs, and then, the pair words
are not synonymous. *Auditory* 1578 is L *auditorius* and has the meaning 'pertaining
to hearing or the sense or organs of hearing', whilst *auditorial* 1859 is connected
with *auditor* (or *auditorium*). *Accusatorial* 1823 has the meaning 'pertaining to an
accuser' and is thus connected with L *accusator* (rather than with obs. *accusator*
ME); *accusatory* 1601 is a Latin loan (*accusatorius*) and means 'of the nature of
an accusation'. *Mediatorial* is connected with *mediator, mediatory* is not; *dedicatorial,*
if ever used, connotes *dedicator.* Moreover, *mediatory* and *dedicatory* connote
mediation resp. *dedication.* This is the general mark of differentiation: words in
-orial are derivatives from such in *-or,* meaning 'belonging to, having the character
of the person'. Words in *-ory* connote the substantive in *-ation* (for more detailed
treatment see *-ory*), they are not derivatives, but anglicizations of actual or possible
patterns in *-orius.* That is why some words in *-orial* are marked 'rare' in the OED:
observatorial 1816 (in collocation such as 'observatorial purposes', 'observatorial
work'), *investigatorial* 1808 ('investigatorial procedure'), *migratorial* 1865. Their
meaning is always connected with the substantive in *-ation. Gestatorial* 1864 is only
used in the cb *gestatorial chair* (of the pope), preferred to the rare *gestatory* 1682

on account of the nuance of weightiness which *-orial* conveys (both words are mere renderings of L *gestatorius*). This nuance may be used for stylistic purposes, as when we speak of a 'tonsorial artist', meaning a barber.

Adjs in *-orial* may also be derived from words in *-orium*, as *sensorial* 1768, *suspensorial* 1871, *tectorial* 1859, all scientific terms.

4. 6. 7.   We have already said that in AL the suffix *-alis* was also tacked on to Greek loans. Here we are interested in a particular formal group. From *grammatica* and *musica* were derived *grammaticalis* LL and *musicalis* ML. On the other hand, the direct loans *grammaticus* and *musicus* had long been in existence, and the new coinages came to look like extensions of them (a parallel phenomenon with Latin adjectives has been treated under 2). *Physicalis* ML was derived from *physica*, thus doubling *physicus* CL. Such pairs became a favorite type of derivation in English. Partly through the medium of Old French, English borrowed the pairs *music* 1250 / *musical* 1420, *physic* 1297 (in the now obs. sense of 'medical profession' which ML had developed as against the AL meaning 'physics') / p h y s i c a l 1447. There were also other names of sciences in *-ic* (corresponding to present-day *-ics* which becomes the rule after 1500) which English had taken from Latin or French, such as *logic, arithmetic, magic, rhetoric*. With the exception of *magic*, the prevalent adjectives are in *-ical*: *rhetorical* 1476, *arithmetical* 1543, *logical* 1500.

4. 6. 8.   There was a second current in the language tending to adapt Greco-Latin adjectives in *-icus* into *-ic*. This co-existence of synonymous pairs has caused a competition the result of which we will try to describe. We may anticipate that, at all times, derivation from names of sciences has shown a preference for extension in *-ical*. The by-forms in *-ic* are, as a rule, weaker and newer than the extended forms (cp. B. Danielsson, 222). Of the earliest group of words, *logical* and *musical* have never had rival words in *-ic*, *rhetoric* is rare; obs. *arithmetic* is quoted only for a short time (1652—1767). The same tendency is to be observed for later adaptation of adjectives in *-icus*, whether they were derived from names of sciences in *-ic(s)* or not (as *geographical, theoretical* from *geography, theory*), also in cases where the root is not the name of a science at all (*identical, tropical* etc.). That the original tendency was towards extension is illustrated by the frequent occurence of earlier extended forms in *-ical*: *poetical* 1384 (*-ic* 1530), *tragical* 1489 (*-ic* 1545), *mathematical* 1522 (*-ic* 1549, rare), *analytical* 1525 (*-ic* 1590), *grammatical* 1526 (*-ic* 1599), *comical* 1557 (*-ic* 1576), *geographical* 1559 (*-ic* 1610, rare), *tactical* 1570 (*-ic* 1604), *theoretical* 1616 (*-ic* 1656), *pedagogical* 1619 (*-ic* 1781), *identical* 1620 (*-ic* 1649). Priority in time of the unextended forms is much rarer. Two examples are *tropologic* 1380 (*-ical* 1528) and *politic* 1420 (*-ical* 1551).

4. 6. 9.   The origin of the extended suffix *-ical* is thus to be sought in adjectival derivation from names of sciences in *-ic*. If we look at the foregoing examples, the priority of *economic* to *economical* and *politic* to *political* seems to contradict this. But it should not be overlooked that the basic substantives were not names of sciences in ME: *politics* 'science of government' is first attested in 1529 (OED) and the corresponding derivative is *political* 1551. *Economics* as the name of a science is first quoted in 1792 so that both *economic* adj and *politic* adj go well with the above rule. An exception is *magic* ME (fr. F *magique*),

which is earlier and stronger than *magical* 1555, probably because it became fixed at an early stage through set expressions such as *magic art, magic glass, magic circle*.

4. 6. 10.   There was, at the beginning, indiscriminate co-existence of two synonymous adjectives. But language does not like to have two words for one and the same notion, and competition was bound to come. What happens in a case of a clash of two synonymous words is usually this: as there can be only one surviver of the fight, one of the words will either be dropped or be given a specified meaning or function that distinguishes it from the original rival. In our case, the result has, however, been a ompromise. On the one hand, the language has shown a tendency to throw out one member (usually the form in *-ic*) from common usage; on the other hand, it has often retained the second member in a specified sense (esp. in scientific terminology). Whereas, for example, *botanical, geographical, theoretical, theological* are commonly used, the counterparts in *-ic* are maintained only in long established names as *Botanic Gardens, Geographic Magazine*. The word *economical* today has the meaning 'thrifty', whilst *economic* means 'belonging to the science of economics'. This characterizes the general tendency of differentiation: as derivatives in *-ic* are, morphologically speaking, derivatives from the basic substantive, they have notionally also a direct connection with the idea expressed by the root. On the other hand, formations in *-ical* are secondary derivatives, i.e. they are derived from adjectives in *-ic* by means of *-al*. This will partly explain why they usually have a remoter and looser relation to the basic substantive. A thing is *historic* if it is or makes history itself, it is *historical* if it belongs to what narrates or deals with history. Books on history are therefore only 'historical' while events are 'historic'. A sound is 'metallic', as it is like metal. An engineer is 'electrical', as he has to do with electric things, but current is 'electric', is the thing in itself. A person is, however, 'erotic', not 'erotical', having in him the quality of 'eros'. Similar distinctions can be made for the following pairs: *identic/identical, comic/comical, theatric/theatrical, poetic/poetical, psychic/psychical*.

4. 6. 11.   I am far from saying that the problem of differentiation between adjectives in *-ic* and such in *-ical* is solved by the above explanation. There is another tendency, already mentioned, to use adjectives in *-ical* when the word is in wider, common use: *geometrical, chemical, critical, clinical, surgical, typical, periodical, analytical, theoretical, theatrical, biblical* are more frequent than their unextended counterparts; but such words as *artistic, dramatic, dynamic, static, pathetic, aesthetic, apologetic, angelic* are the ones commonly used.

4. 6. 12.   A third factor is this: the scientist uses the unextended forms much more, as for him the quality expressed by the adjective is more directly and intimately connected with the thing to which it is applied than it is for a non-scientist (cp. our first argument above). Scientific terms are therefore mostly *-ic*: *linguistic, semantic, phonetic, phonemic, tannic, toxic, electrolytic, magnetic, volcanic, plutonic, tectonic, eolithic, geostatic, geodesic, sematic* etc. The directness of relation and their corresponding designation is clearly seen in medical terms, which all have the suffix *-ic*, as they are generally applied

to phenomena of the body and therefore "primary attributes": *anemic, hyperemic, allergic, antiseptic, metabolic, gastric, gastrocolic, pneumogastric, pneumonic, metagastric, entric, neurasthenic, neuritic, nephritic, rachitic, asthmatic, apathetic* etc. Though dictionaries often quote forms in *-ical* also, they are hardly ever used.

4. 6. 13.   Exceptions to this tendency are words with a termination that also exists in the form of an independent word. Terms in *-logical*, for instance, are commoner than their by-forms in *-ic*. We say *archaeological, genealogical, geological, palaeontological, physiological, psychological, biological, sociological, theological, philological* etc. They are the words of the scientist resp. scholar himself, and exceptions are infrequent (we speak of a *geologic period, physiologic conditions*). This explains why we use *phonetic* and *semantic*, but usually *morphological* (besides *morphologic*) and *syntactical* (besides *syntactic*). The two first belong to the group of words discussed under 4. 6. 12, the latter follow the independent words *logical* and *tactical*.

4. 6. 14.   What we have stated are tendencies rather than rules. Nothing is absolute, and it will be possible to find words used contrary to the general trend. As one of my American colleagues, a professor of physics, told me, the term *electrical current* is sometimes used by English scientists. And then, we speak of '*electrical energy*' though the case is pretty much the same as with '*electric current*'.

4. 6. 15.   Co-existence of *-ic* and *-ical* words is not absolute either. For the preceding medical adjectives we will hardly find counterparts in *-ical*. Other such words are: *basic, semantic, drastic, aphoristic, apheretic, asyndetic, alcoholic, athletic, barbaric, despotic, characteristic, civic, domestic, frantic, patriotic* a.o. On the other hand, no *-ic* forms exist beside *clerical, critical, cynical, logical, mechanical, musical, rhetorical*, as the adjectives are derived from substantives in *-ic*. Jespersen overstates this tendency (MEG VI. 22. 36). Though "derived", there are adjectives in *-ic*, as *skeptic, magic, arithmetic, stoic, classic, semantic* (going with *semantics*) a.o. Adverbs from adjectives in *-ic* and *-ical* are made in *-ically*. But *catholicly, franticly, heroicly, publicly* are also found, *publicly* being the only possible form of the adverb. This is probably another reason which favors the dominance of *-ical* in commonly used words. In AE, /ɪklɪ/ has wide currency, see Kenyon-Knott, op. cit. Bibl. III, *-ical*. With scientific adjectives the situation is not the same, as they are chiefly used as predicate complements or adjuncts, not as adverbs.

4. 6. 16.   The suffix *-al* is never used for derivation from proper names of persons, places, nations, or races (this function falls to *-an, -ian*; the OED quotes the uncommon word *Petrarchal* 1818). We cannot, therefore extend *-ic* adjectives of this group into *-ical*. There are only *Miltonic, Byronic, Quixotic, Platonic, Aristophanic* etc. *Slavic, Gothic, Germanic, Teutonic, Hellenic, Vedic* etc. We may, however, speak of *Hellenistic* or *Hellenistical History*, as Hellenists are no nation or race. A similar exception is *Druidic* and *Druidical*.

4. 6. 17.   *-ical* is now felt to be directly tacked on to several learned words such as *despotical, domical, conical, druidical, periodical, puritanical, eremitical*,

parsonical but it has also established itself with a group of non-scientific words having the basic meaning 'queer, odd, spleeny'. The now obs. *frenzical* 1547 seems to have attracted *whimsical* 1653, *nonsensical* 1655, which were later followed by *coxcombical* 1716 (often pronounced as if derived from *comical*), *farcical* 1716, *lackadaisical* 1768, *quizzical* 1789, *twistical* 1806. There are also found *spleenical* (Keats), *hobbyhorsical* (Sterne, Tennyson), *pillar-boxical* (A. Huxley), *good-sensical* (Stephen Spender). The word *whimsy* itself which the OED cannot explain, was prob. coined under the influence of *frenzy*, by way of jocular extension.

4. 6. 18.   After the pattern of twin adjs in *-ic/-ical*, adjs in *-oid* may also take *-al*. Exs are *alkaloidal, asteroidal, concoidal, rhabdoidal, rhomboidal*. But again, the scientist will prefer the unextended forms and speak of *paranoid* and *schizoid* persons.

4. 6. 19.   From loans such as *spiritual* 1303 (F, LL), *actual* ME (F, LL), *effectual* 1375 (F, LL), *textual* 1386 (F), *intellectual* 1398 (F, L), *conventual* 1425 (ML), *habitual* 1526 (ML) which could be analysed as E word plus -ual /juəl, šuəl/, sprang coinings with this sf such as *accentual* 1610, *eventual* 1612—1615 (after *conventual*), *tactual* 1642 (after *visual*), *conceptual* 1662 (after *intellectual*), *factual* 1834 (after *actual*), *contractual* 1861 (after *actual, factual, tactual*), *instinctual* (rec., after *intellectual* and *sensual*). Only *spiritual* and the derivatives from a monosyllabic basis are homologically stressed after the radical; in the other words the stress lies on the syllable preceding *-ual*.

As all derivatives in *-ual* end in *-tual*, we may say in synchronic terms that derivatives are made from anglicized Latin words in *-t* on the alternation /t-tjuəl, tšuəl/. Historically, all the earlier words in *-tual* participated in the process of assibilation of EMoE unstressed /tju/ to /tšu/.

4. 6. 20.   Adjectives in *-iac* have by-forms in *-iacal*: *ammoniac, cardiac, demoniac, elegiac, hypochondriac, maniac, paradisiac*; *Aphrodisiac, Syriac* have not. Only extended forms exist in the case of *simoniacal, zodiacal*, the *-ic* forms being the substantives.

Stress and pronunciation vary according to one or the other form of the pairs. The type is [ə'moniæk/æmə'naiəkəl], i.e. *-iacal* is stressed on the first vowel, whereas with *-ic* words the stress is on the syllable preceding the *-ic*. *Elegiac* is pronounced [ɛlɪ'dʒaiək] or [ɪ'lidžiæk].

With the pairs *-oid/-oidal* the situation is this: *-oidal* is always stressed on the first syllable ['oidəl], whereas stress in *-oid* words, which are substantives at the same time, is that of the substantives.

Adjectives in *-ical* are stressed on the syllable preceding the suffix. The situation is the same as with *-ian*. Cp. also 4. 1. 22.

-al implies shift of stress as against the pattern of the basis only when the syllable preceding the sf is heavy through vowel or consonantal group (*álkaloid/ alkaloídal, díphthong/diphthóngal, órchestra/orchéstral, áncestor/ancéstral, ínstrument/instruméntal*; but cf. 4. 1. 23). In this case the syllable preceding the sf is stressed. The stress does not go farther back than the antepenultimate (*árchitecture/architéctural, órigin/original, hypocóndriac/hypocondríacal*).

For the stress history see B. Danielsson, 188—191.

4. 7. 1.   -an (-ian) /ən/, /ıən/

The Latin suffixes *-anus* and *-ianus* are not basically different from each other. The word in *-anus* denoted a person or thing belonging to a place, generally a town, but occasionally also a river or the like. The sf was chiefly tacked on to Italic place-names of the *-a* or *-o* declension: R o m a n u s, *Albanus, Cosanus, Cumanus, Coriolanus, Nolanus, Nomentanus, Syracusanus* | P a - d a n u s, *Cispadanus, Transpadanus* | *Bosporanus, Cisrhenanus, Transrhenanus*. There are also a few Greek names of the *-a* declension which take *-anus*, as *Spartanus, Thebanus, Troianus*. We have the sf also with nouns denoting types of localities, as u r b a n u s, *vicanus, insulanus, montanus, paganus, rusticanus, castellanus*. Appurtenance to persons was expressed by the same sf. In this case it was, however, tacked on to the gentile name, designating one descendant from someone. As gentile names ended in *-ius*, the derivatives came to end in *-ianus*, as C o r n e l i a n u s, *Curianus, Naevianus, Iulianus, Manlianus* (from *Cornelius, Curius* etc.) a.o. Subsequently, *-ianus* was in- dependently tacked on to other proper names, as in *Catonianus, Caesarianus, Ciceronianus, Neronianus, Galbianus, Othonianus*. The sf *-anus* has only occasional coinages of this type, derived from cognomina only, as *Sullanus, Augustanus*.

4. 7. 2.   Originally, neither sf was used to denote appurtenance to or proven- ance from countries. A f r i c a n u s from *Africa* is perh. the first word which breaks this rule. In Classical Latin it is not, however, used to denote the inhabitant of Africa (in this case *Afer* is used). Formed on the same type or after Gr *Asianós* (Thucydides) is *Asianus*. Words such as *Germani, Aquitani, Hispani, Lusitani, Sicani* (denoting peoples) may have helped to strengthen the sf, though *-ani* here is not derived from *-a*. Furthermore, *-anus* had in many words come to replace original *-us* or had obtained a place beside it: *Africus/Africanus, Gallicus/Gallicanus, rusticus/rusticanus, praetorius/prae- torianus, Olympius/Olympianus* LL. In LL and still more in ML, *-anus, -ianus* are used for derivation from names of countries and towns: *Tuscanus* LL, *Etruscanus* began to replace CL *Tuscus, Etruscus*. Where the stem ended in *-i*, the sf became *-ianus*, as in *Italianus, Arabianus, Syrianus, Lydianus, Phrygianus* | *Parisianus, Remtianus*. As names of countries in *-ia* are much more frequent than those in *-a* (owing to the afflux of Greek names in *-ia*), *-ianus* practically prevailed while words in *-anus* were rarer.

I have dwelt so long on Latin because Latin is the basis which we must know to understand the use of *-an, -ian* in English. It is the linguistic position of Medieval and Modern Latin that English takes up.

4. 7. 3.   The sf *-ian*, as denoting a p. or th. belonging to a country, is found in derivatives from names of countries which in Medieval or Early Modern Latin ended in *-ia*. Thus *Burgundian* 1578 is derived from L *Burgundia*; E *Burgundy* is much newer (1672). It is necessary to stress the general fact as it explains the learned tinge inherent in words formed with this sf. In the ME period, some words came in through the medium of French. In this case the earliest spelling is *-ien* which is the form of the OF sf: e.g. *Persien, Sirien*. These words were subsequently latinized into *Persian* resp. *Syrian*. Other ME

loans are *Italian, Arabian*. But the real inrush of *-ian* words begins with the 16th c. A few exs may suffice: *Anglian, Austrian, Australian, Bohemian, Burgundian, Carinthian, Carpathian, Caledonian, Cilician, Dalmatian, Etrurian, Esthonian, Iberian, Ionian, Lydian, Prussian, Russian, Scythian, Utopian*.

4. 7. 4.   Derivatives from latinized modern names are *Aberdonian (Aberdeen), Wincastrian (Winchester), Oxonian, Etonian, Cantabrigian (Canterbury), Glasgowegian*. Hence we have other derivatives from names for which no latinized basis exists, as *Bostonian, Devonian, Bristolian*. Such names sound learned, and ordinary names with the sf have the same tinge, which may make a writer use them for stylistic purposes. *Vanity-Fairian, Pickwickian* contain a shade of mock importance.

4. 7. 5.   The line of the L type *Cornelianus* which has never been disrupted throughout the whole Latinity, has also been taken up in English. Even in Medieval Latin, derivatives of this type had an academic character owing to their use in scholarly language. English derivatives are 16th c. and later. Exs are *Arian, Augustinian, Calvinian, Monarchian* (heretics of the second and third centuries), *Gregorian, Socinian, Aristotelian, Carolingian, Carlovingian, Merovingian*. The word *christian* also is a latinization of earlier *cristen*.

4. 7. 6.   There are derivatives from English names with the same learned or academic character, many of them in *-onian*, as B a c o n i a n, *Byronian, Addisonian, Miltonian, Johnsonian, Morrisonian, Tennysonian, Nelsonian*, in imitation of these *Gladstonian, Johnian | Shakespearian, Spenserian, Arnoldian, Falstaffian, Ruskinian, Wordsworthian, Spencerian, Jennerian, Salisburyan, Freudian, Einsteinian*, Shavian (f. Shaw).

Non-English famous names also take *-ian*, under the influence of Neo-Latin (which is likewise responsible for the corresponding uses in French and German: F *Racinian, Napoléonien, Hugolien* etc. | G *Fichtianer, Kantianer, Hegelianer, Wagnerianer* etc.), *Lamarckian, Kantian, Hegelian, Wagnerian, Freudian, Einsteinian* etc. This use is not older than the 19th c. (as in German; French has some older coinages).

The derivatives are used both as adjs and sbs with the basic meaning '(one) pretending to or characterized by material or spiritual descent from . . .'.

4. 7. 7.   English has extended the sf *-ian* to all Latin words denoting one belonging to a social class or order in old Rome. The tendency existed in OF, too, which formed *patricien* and *plébéien* (both 14th c.) from L *patricius* resp. *plebeius*. The semantic field of L *-ianus* had thus extended from local appurtenance to social appurtenance. In the same group belonged also *chrétien* and *païen*, though they had entered the group somewhat differently: the *pagani* were originally those who lived in the country as opposed to those inhabiting the cities and towns, i.e. the *christiani* (as christianism had first taken root in the cities). E *patrician* and *plebeian* are thus loans from French. Another loan is *barbarian* 1549 (= OF *barbarien* 'an inhabitant of the 'country' of Barbarie'). The group was added on to by *equestrian* 1656, *proletarian* 1658, *pedarian* 1753 (fr. L *pedarius* 'senator of an inferior grade'). *Equestrian* attracted *pedestrian* 1716, though formally only, as there was no such thing as an 'ordo pedestris' in Rome.

4. 7. 8.   We have a parallel phenomenon with zoological terms. Sbs denoting a class or order in -a, -ia, -ii, -ea form derivatives in -an, -ian, -ean which denote the individual specimen. Exs are *acalephan, acanthocephalan* / *reptilian, mammalian* / *acanthopterygian* / *crustacean*. The competition of -ian is visible in that there are also formations like *ametabolian* fr. *ametabola*. As notionally related we may here mention the word *sesquipedalian* (fr. L *sesquipedalis*) 1615 'p. or th. measuring a foot and a half in height or length', formed as though there were a zoological class called the sesquipedalia.

4. 7. 9.   -an is a much weaker sf than -ian. It is not used with English personal names. The only exception is *Elizabethan* 1817 which is obviously coined after *Augustan* 1704 H, itself fr. L *Augustanus*. The implication of 'cultural classical standard' was prob. the decisive semantic element for the coinage. *Lutheran* 1521 is prob. L *Lutheranus, Mahometan* 1529 repr. ML *mahometanus*. The more usual word today is *Mohammedan* 1681, partly from *Mohammed*, partly a transformation of *Mahometan. Petrarchan* 1827 exists beside *Petrarchian*.

4. 7. 10.   Latin names in -aéus, -éus, ‿ĕus are adapted with the termination -aéan, -éan, ‿ĕan: *Manichaean, Judaean, Linnaean* (fr. L form *Linnaeus*, but also *Linnean*, fr. *Linné* direct), *Epicurean, Thesean, European, Orphean, Morphean, Promethean, gigantean, Mediterranean*. Pronunciation and stress are usually, but not consistently, determined by the Latin form. Irregular is *Prométhean* (fr. L *Promethĕus*). *Morphean* is coined after *Orphean*, a Latin originaldoes not seem to be recorded. Irregular is also *antipodéan* fr. *antipodes*.

Anglicizations are *publican* 1200 (= L *publicanus*) 'tax-gatherer in Rome' (the sense 'keeper of a public house', BE, is first quoted 1728) and *Puritan* 1572 (= NL *puritanus*, derived from *puritas*, perh. under the influence of *Catharan* or *Lutheran*).

4. 7. 11.   Modern geographic names in -a frequently derive adjs in -an: A m e r i c a n, *Corsican, Korean, Bahaman, Jamaican, Guatemalan, Alaskan, Okinawan, Tacoman, Topekan*. But usage is not quite settled as to -an and -ian. "The people of Alabama call themselves Alabamians, and those of Indiana call themselves Indianians, but in both States there are minorities which object to the redundant *i*" (Me/AL⁴, 548), see also 'Names for Citizens', by G. R. Stewart, ASp 1934, p. 78). *Arizona* derives *Arizonian, Canada Canadian* (perh. = F *Canadien*).

Names in -o form derivatives in -oan, as *Chicagoan, Elpasoan*, but also in -onian, as *Buffalonian, Torontonian*. Many American names are of Romanic origin and therefore derive on a Romanic basis -o/-an. Exs are *Ontarian, Mexican, Puerto-Rican, San Franciscan, San Diegan, Sacramentan, Palo Altan, Los Gatan, San Matean*. Spanish-coined are *Santa Cruzan, San Josean*.

Derived from a consonantal stem is *Tibetan*.

4. 7. 12.   In ‿ian words, the stress is on the syllable preceding -ian. In -an words, the stress in on the syllable which is accented in the simple word. *Elizabéthan* is derived from the Latin form *Elizabētha*, on the analogy of *Augustus/Augustan*.

4. 8. 1. -ance, -ence /əns/

is a sf with abstract deverbal sbs, meaning 'act, fact of . . .'. Occasionally it overlaps with *-ancy, -ency* from which it is, however, functionally different.

E *-ance* comes from OF *-ance* which goes back to L *-antia* as well as *-entia*. In Medieval vernacular Latin, *-antia* had largely encroached upon the domain of *-entia* (as *-ant* had to a great extent ousted *-ent*), and in OF, the prevailing form is *-ance* in popular parlance[1]. 'The generalization of *-ance* at the expense of *-ence* occurred in the ninth and tenth centuries' (Malkiel, p. 58). Words borrowed from OF (I quote in OF spelling) are *acceptance, aggrievance, acordance, allouance, anuiance, aquitance, atendance, avertance, continuance, discontinuance, desacordance, destorbance, desistance, encombrance, endurance, enheritance, entrance, gouvernance, grevance, parformance, quitance, resemblance, resistance, remembrance, repentance, sevrance, variance* which could be connected with verbs[2]. The ME spelling was usually *-aunce* which was later altered to *-ance*. After 1500, the spelling was often adjusted to the Latin conjugation of the verb. There is, however, much inconsistency (e.g. *resistance, desistance* which should have *-ence* etymologically).

4. 8. 2. The sf quickly gained a footing in English. As early as the 15th c. we find derivatives from native verbs, as u t t e r a n c e 1436, *hindrance* 1436 (which was perh. prompted by *resistance* 1417 and which attracted, as its counterpart, the word) *furtherance* 1440. Verbs of Romance origin have, however, in the main been favored, such as *conveyance, joyance* (chiefly poet.), *permittance, procurance, dependance, consistence, guidance, clearance, admittance, urgence, pursuance* (16th c.), *emergence, aberrance, abhorrence, compliance* (17th c.), *interference, convergence, remittance* (18th c.), *deterrence, impedance, resurgence, issuance* AE (19th c.). From native verbs are derived (besides the two quoted above) *riddance* 1535, *forbearance* 1576, *forbiddance* 1608, *abidance* 1647, *bearance* 1725.

Assistance, existence, perseverance (all ME) are older than the vbs belonging to them, but are now apprehended as derived from the vbs. On the other hand, the loans *deference, reverence, inference, preference* have not been actualized, as the difference in pronunciation shows from the corresponding verbs. *Appearance* is an E derivative for the speaker now, though the word was introduced as a loan (ME *aparaunce* was refashioned after the verb *appear*).

The sf has formed several terms of electrical engineering, coined after the pattern of *resistance*, as *reactance* 1856, *impedance* 1886, *inductance* 1888. The word *capacitance* 1916, however, is no deverbal derivative but a blend of *capacity* and *reactance*.

4. 8. 3. In some cases, there is no English verb, but an adj in *-ant, -ent* with which the sb in *-ancy, -ence* thus comes to be derivationally connected, denot-

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[1] Yakov Malkiel, The Development of the Latin Suffixes *-antia* and *-entia* in the Romance Languages, with Special Regard to Ibero-Romance. University of California Publications in Linguistics, Vol. I, No. 4. University of California Press 1945.

[2] Hugo Brüll, Untergegangene und veraltete Worte des Französischen im heutigen Englisch. Halle 1913.

ing action or practice of the (non-existent) vb underlying the adj. This derivational connection is due to the co-existence of *-ance, -ence* and *-ancy, -ency* and the implied contrast of action and quality or property. I have treated the subject under *-ancy, -ency* and will therefore give here a few instances only of such sbs as have no Latin or French original: *iterance* 'iteration, repetition' 1604 is 'deverbally' connected with *iterant* 1626, *conversance* 1609 with *conversant* 1340 in sense 'practice of being conversant', *dominance* 1819 with *dominant* 1532, *senescence* 1695 with *senescent* 1656, *sentience* 1839 with *sentient* 1603.

4. 8. 4.   The sf is chiefly used with durative verbs. This distinguishes it from *-al* which is tacked on to vbs implying a final aim. Occasionally we find rival pairs such as *acquittance/acquittal, pursuance/pursual, abidance/abidal, resistance/obs. resistal, forbiddance/forbiddal, guidance/obs. guidage, continuance/continuation.*

The stress remains on the syllable which is accented in the simple word. With a very few exceptions (*continue, encumber, issue*) the deriving verbs are end-stressed.

4. 9. 1.   -ancy, -ency /ənsɪ/

forms abstract sbs from sbs and adjs in *-ant, -ent* with the meaning 'tendency to, state or quality of being . . .'. It arose under the influence of words in *-acy* which went with sbs and adjs in *-ate* (see 4. 3). The equation is thus *-ant : -ancy = -ate : -acy*. The earliest instances occur in the 14th c., but the type is not really common before the 16th c. Early exs are *sergeancy* 1330 (cp. also AF *sergeancie* against OF *sergeantie* 'sergeanty'), *innocency* 1357, *excellency* 1400, *inobediency* 1432 (—1634, obs.), *sufficiency* 1495, *insolency* 1494. The corresponding adjs are all older. Later are recorded *decency, indecency, pertinency, relevancy, efficiency, concurrency, consistency, permanency, vacancy, pertinency, flagrancy, fragrancy, petulancy* (16th c.), *compliancy, stagnancy, pendency, militancy, vagrancy, fluency, deficiency, insolvency, complacency, malignancy, agency, pruriency, redundancy, tendency* (17th c.), *repellancy, pliancy, truancy, opponency, leniency, flippancy, ascendancy* (18th c.), *insistency, constituency, lambency, stringency, trenchancy, insomnolency* (rare), *iterancy* (19th c).

4. 9. 2.   As words in *-ant, -ent* represent L words in *-ans, -ens* which were accompanied by abstract sbs in *-antia, -entia*, E *-ancy, -ency* indirectly came to be the equivalent of these. As, at the same time, L sbs in *-antia, -entia* were represented by sbs in *-ance, -ence* (through the medium of French, see sf *-ance, -ence*), there developed a certain competition between *-ance, -ence* and *-ancy, -ency* which has often led to doublets. The sense differentiation has, however, in the main kept to the original principle of coining which is that sbs in *-ance, -ence* are deverbal nouns, expressing the idea of action, whereas sbs in *-ancy, -ency* are deadjectival nouns expressing the idea of state or quality: *inherence* 1577 belongs to *inhere* 1586, *inherency* 1601 to *inherent* 1578, *insistence* 1611 to *insist* 1586 H, *insistency* 1859 to *insistent* 1624, *compliance* 1641 to *comply* 1602, *compliancy* 1643 to *compliant* 1642, *tendency* 1628 to (formerly common) *tendent* 1340.

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4. 9. 3. In cases where the idea of action was predominant, the form in *-ance*, *-ence* prevailed, even if no English verb existed and an adj in *-ant*, *-ent* was in use. In cases where *-ance*, *-ence* directly renders a Latin or French original the situation is normal, as the sf is also the adapting termination for L *-antia*, *-entia* and F *-ance*, *-ence*. But the tendency is also observed where no such original ever existed (see *-ance*, *-ence*): *fragrance* 1667 (L) has proved stronger than *fragrancy* 1578, *intelligence* ME stronger than *intelligency* 1598, *observance* ME (L, F) stronger than *observancy* 1567, *persistence* 1546 (F) stronger than *persistency* 1597, *refluence* 1592 (no French or Latin) stronger than *refluency*, *sentience* 1839 (no French or Latin) stronger than *sentiency* 1850.

4. 9. 4. When the idea of property or quality is predominant, *-ancy*, *-ency* is occasionally preferred with loans also: *pudency* 1611 renders LL *pudentia*, no **pudence* appears to have been recorded; there are also *recumbency* 1642 (adj 1705) and *concomitancy* 1563 (adj 1605). But these cases are rare. As a rule, *-ancy*, *-ency* is only used as a formative to derive sbs from adjs. Unlike *-ance*, *-ence*, it has not become established as an adapting termination for loans in L *-antia*, *-entia* or F *-ance*, *-ence*.

4. 9. 5. In a number of cases, the form in *-ance*, *-ence* has prevailed without any apparent reason. Examples are *difference* 1340, *innocence* 1340, *indulgence* ME (*-cy* 1547), *absence* 1374 (the *-cy* forms are obs. now), *importance* 1508, *eminence* 1597, *reluctance* 1641 (*-cy* 1621), *luxuriance* 1728 (perh. infl. by *exuberance*). *Patience* and *impatience* (both 1225) have never been seriously rivaled by late *patiency* 1697 and *impatiency* 1526. Sometimes phonetic reasons seem to have played a role. Words in *-lence* are more usual than their counterparts in *-lency*. Exs are *petulance, redolence, insolence, succulence, turbulence, malevolence, violence, virulence*. The same applies to words in *-escence* as *evanescence* (no *-cy*), *obmutescence* (no *-cy*), *obsolescence* (no *-cy*), *turgescence* (*-cy* less used). *Elegancy* 1676, however, could not oust *elegance* 1510 as it was the French word for a thing that was considered French.

4. 9. 6. The forms in *-ce* have usually proved weaker than or have been ousted by the forms in *-cy* when the adj in *-ant*, *-ent* existed, but a verb was either lacking or felt to be unconnected for phonetic reasons. Exs are *complacence, concomitance, lenience*, the obs. words *efficience, decence, indecence, fluence, constance, sufficience, malignance*.

The normal development in case of 'doublets' is either elimination of one of the forms (as seen in preceding paragraphs) or sense differentiation. *Insignificance* and *insignificancy* denote almost the same, but *insignificancy* may signify a p. or th., a sense which *insignificance* has not. *Dependence* is only abstract, *dependency* has a concrete meaning, too. *Emergence* is the deverbal abstract sb, *emergency* means 'unforeseen combination of circumstances'.

A few words in *-cy* have developed a concrete sense, as *vacancy, dependency, inhabitancy, constituency*. There are a few derivatives from sbs, as *occupancy, tenancy, constituency*.

The stress remains on the syllable which is accented in the simple word.

4. 10. 1.   -ant, -ent /ənt/

has formed quite a number of words in English, chiefly on a Latin basis of coining. These words are agent-nouns, ultimately going back to Latin participles in *-antem, -entem* used as substantives. The earliest words recorded are loans from French, chiefly legal terms such as *tenant* 1325, *defendant* 1400, *accountant* 1453, *inhabitant* 1467, *appellant* 1480, *complainant* 1495. A number of them were analysable as English derivatives, being accompanied by verbs (the vb *appeal* was formerly spelt *appel*, so *appellant* was a derivative from it for the speaker). S e r v a n t 1225 was felt to be connected with *serve* 1225; and there are a few more words of the same category, as *attendant* 1555 H, *dependant* 1588 (either an Ec after prec., or F *dépendant*). To this group also belongs the word *adherent* 1460 H which is F *adhérent* from which *adhere* 1597 H was later back-derived.

4. 10. 2.   On the other hand, *-ant, -ent* rendered the Latin participial ending *-ans, -ens*, and participles were frequently used as agent-nouns in Medieval Latin (which accounts for the French usage illustrated above). Latin-coined are r e s i d e n t 1487 (but F *résident* is recorded in the 13th c.), *respondent* 1528, *opponent* 1588, *participant* 1562, *occupant* 1596 (also in F), *decedent* 1599, *visitant* 1599, *disputant* 1612, *administrant* 1602, *contestant* 1665, *attestant* 1880, *applicant* 19th c. *Inhabitant* 1462 is either L *inhabitans* or F *in-, enhabitant*, but *deforciant* 1585 shows the Latin form against Anglo-French *deforceant*. A few other words are *litigant* 1638 (L, F), *informant* 1693 H, *affirmant* 1747, *aspirant* 1739, *postulant* 1759 (L, F).

4. 10. 3.   The preceding words are either outspoken legal terms or carry the stamp of formal procedure. Several of them are analysable as English verbs plus the sf *-ant, -ent*. But only in a very few cases has this led to coinages from an English word (we might, however, consider *informant, affirmant, contestant, attestant* and some others formed in this way; the word *aspirant* is sometimes pronounced [əs'paɪrənt], in AE chiefly so): *claimant* 1747 is 'one who claims'; it may also be analysed as 'one who holds a claim' which seems to have led to *annuitant* 'one who holds an annuity' (the word is quoted earlier (1720) than *claimant*, though) which was followed by *chargeant* 'one who has a charge upon an estate' 1887 (app. Scotch only).

  Consultant 'consulting physician, lawyer, engineer (etc.) who advises' (the OED has only the meaning 'consulting physician'; the verb *consult* in back-derived sense 'give advice' is not recorded either, but the verb is used so in AE) renders F *consultant* 'giving counsel'.

4. 10. 4.   Modern Latin uses participles in *-ans, -ens* to denote the impersonal agent, chiefly in the terminology of medicine (as in *stimulans* 'a stimulant'), English (as well as French) has made extensive use of this type in medicine, chemistry, physics and in the commercial jargon connected with them. Exs, partly now on a native basis of coining, are *illuminant* 1644, *solvent* 1671, *deobstruent* 1691, *absorbent* 1718, *evacuant* 1730, *stimulant* 1728, *saturant* 1775, *propellant* 1814, *irritant* 1802, *lubricant* 1828, *deodorant* 1839, *repellant, refrigerant, contaminant, denaturant, digestant, depressant, disinfectant, anaesthesiant*, even *coolant*.

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4. 11. 1.   -ard /ə(r)d/

came into English through loans from French such as *bastard, coward, buzzard,* all of them depreciative terms (the buzzard was a 'useless' kind of hawk, and the English word acquired the sense 'worthless, stupid, ignorant person' which is now dialectal). By the side of *bastard* there existed the word *bast* (now obs.) with the same meaning. This co-existence of two synonymous words may have favored the rise of similar pairs: *shrew*/obs. *shreward* 1297—1338 'scoundrel', *dull*/dullard, *dote*/*dotard* 1386, *slug*/*sluggard* 1398, *wise*/*wizard* 1440, *drunk*/*drunkard* 1530. *Niggard* ME is not clear, *dastard* 1440 is prob. a blend of *damned* and *bastard*. As *dull, dote, slug* were vbs also, deverbal derivatives could be formed, such as blinkard 'one who lacks mental perception' 1510, stinkard 1600, *braggart* 1577, *laggard* 1702. No words appear to have been coined since about 1700. *Communard* 1874, *dreyfusard* 1882, *dynamitard* 1882 are loans from French.

4. 11. 2.   *Lollard* 1390 is generally supposed to represent MDu *lollaerd*, but as

-ard was much in favor in ME, it is quite possible that it is an Ec, refashioning older *lollere*.

The derogatory character of the sf refashioned a few other ME words, too, as *jailer* to *jailard*, *holer* 'lecherous person' to *holard*, *trichour* 'traitor' to *trichard*. In other cases, however, *-ard* is a substitute for other sfs without any apparent reason, as in ME *hanszard* fr. *hanser* 'Hanseatic', *scholard* fr. *scholar*.

4. 11 3.   *Staggard* 'a stag in its fourth year' 1400 shows an isolated use of

the sf. In *buzzard* 'beetle' (about 1600) the sf is perh. merely a variant of *-er*, as in *buzzer* 1606 'insect that buzzes'. In *blizzard* 1834 the sf may likewise be a variant of (unrecorded) *-er* (the root is imitative).

Loans are words such as *placard, standard, Spaniard, tabard* (F), *tankard* (Du), unexplained are *bollard* 1844 (a nautical term, meaning 'post for securing ropes to'), *custard* 1450. *Steward* is OE *stig-weard*.

Formerly, *-ard* was often spelled *-art* which has remained the established form with *braggart*.

4. 12. 1.   -árian /'erɪən, 'ɛrɪən/

originated as a mere rendering of Latin words in *-arius* in the second half of the 16th c. The earliest example known to me is sacramentarian 1535 (Luthers's term for Protestant theologians with certain 'sacramental' views). Another word is *quinquagenarian* 'captain of fifty men' (extended from *quinquagenary* 1382 = L *quinquagenarius*). The kind of extension is similar to that we have as far back as Late Latin in *vicarianus* fr. *vicarius* (cp. OF *premerain* 'first' and Prov. *primairen* 'situated in front' = L *primarianus* fr. *primarius*). *Sacramentarian* was followed by *disciplinarian* 1585 'Puritan who favored the Presbyterian discipline'. After these, a large group of words from the ecclesiastical sphere were coined in the 17th c. and later, all with the meaning 'member of a sect, holder of a tenet, doctrine or ecclesiastical principle', as *Trinitarian* 1628, *Unitarian* 1657, *Predestinarian* 1638, *Sublapsarian* 1633, *Supralapsarian*

1633, *Antilapsarian* 1674, *Sabbatarian* 1613, *sectarian* 1649, *Infralapsarian* 1631, *latitudinarian* 'one who favors latitude in religious thought' 1662, *adessenarian* 1751, *libertarian* 1789.

4. 12. 2. Non-religious principles are implied by *Parliamentarian* 1644 'one who took the side of P. in the Civil War', *necessarian* 1777 = *necessitarian* 1798 'a believer in necessity', *humanitarian* 1819, *authoritarian* 1879, *equalitarian* 1799 = *egalitarian* 1885, *attitudinarian* 1754, *utilitarian* 1781, *societarian* 1822, *platitudinarian* 1854, *brutalitarian* 1904, *totalitarian* 1928, *charitarian* 1930 and others.

4. 12. 3. The principle of coining was orig. that of rendering L *-arius* by E *-arian*. Subsequently, however, *-arian* gained formative independence in that it was apprehended as a sf in its own right, being tacked on to the Latin stem. Once *sacramentarian* and others existed it did not matter whether there was a Latin original in *-arius*: *sacrament-arian* leads to *Parliamentarian, establishmentarian*. This explains *veget-arian* (formed like *veget-able, veget-al, veget-ation*, not 'irreg. f. vegetable' OED). The parallelism of trinity/trinitarian led to *societarian, neutralitarian, authoritarian, totalitarian, charitarian* etc. directly Derivation from an English word is exceptional: *nothingarian* 'one who holds no religious belief' 1789 is a serious term, also rare *fruitarian* 1893, but *nutarian* (q. Je VI. 21. 22) is a jocular coinage (after prec. and *vegetarian*). *Packetarian* 'one of the crew of a packet-boat' 1882 joins the 'group' words of the following paragraph.

4. 12. 4. Adaptations from Latin are also *proletarian* 1658, *aularian* 1695 (which acquired the particular meaning 'member of a hall at Oxford or Cambridge'), *pedarian* 'a senator in ancient Rome who had no vote of his own' 1753. The common denominator of these words was 'one belonging to a particular group', which may have helped to form *septuagenarian* 1715, *sexagenarian* 1738, *nonagenarian* 1804, *octogenarian* 1815, *quadragenarian* 1839, *quinquagenarian* 1843 H 'one of the group of those who are in their forties etc.'. The unextended forms in *-ary* (not existing for 40 and 90 ?) are rare by-forms, though older than the extensions. *Proletary* is today only a term of Roman sociology.

In *abecedarian* 1603 (= ML *-arius*), *atrabilarian* 1678 (= *atrabilarius* ML) and *valetudinarian* (= *valetudinarius* LL) 1703, *veterinarian* 1646, *agrarian* 1618, *antiquarian* 1610, *librarian* 1670 *-arian* is prob. still merely adaptational for L *-arius* (*abecedarian, antiquarian* and *librarian* are possibly influenced by *grammarian* which is, however, OF *gramarien. Vulgarian* 1650 (the Latin is *vulgaris*, sb 1804) follows *proletarian*.

4. 12. 5. Before the 16th c. Latin words in *-arius* had been adapted with the termination *-ary* and occasionally continued to do so later, as *veterinary* 1790. But on the whole, the tendency is to reserve *-arian* for the formation of sbs; this is the rule for such as are coined with one of the meanings treated above. The words, like other sbs, can be used as adjuncts. Adjs adapted from Latin words in *-arius* are usually formed in *-ary*. There is a difference between *vestiary* 'relating to dress' 1622 and *vestiarian* 'relating to ecclesiastical vestments' 1850. *Sectarian* is used with reference to christian sects, whereas the word *sectarial* is used with reference to Indian religions.

4. 13.   -ary /əɪɪ, ɛɪɪ/

is an adjectival sf with·words of Latin origin. Latin adjs in *-arius* were adapted as *pígmentary, eleméntary, dietary, stationary, tributary* (all ME), *testamentary* 1456, *disciplinary* 1593. Since these words were analysable as English roots plus *-ary*, other words could easily be formed. Derivatives are phonetically characterized in that they end in *-nary* (chiefly *-ionary*), *-tary* (chiefly *-mentary*) and (less frequently) *-uary*. English coinages are found from the end of the 16th c. on, as c a u t i o n a r y 1597, *complementary* 1599, *instrumentary* (obs., 1564—1638), *discretionary, fractionary, fragmentary, probationary, provisionary* (now rare), *reversionary, institutionary, supplementary, traditionary, textuary, visionary* (17th c.), *convulsionary, complimentary, residuary, domiciliary, insurrectionary, revolutionary* (18th c.), *cavitary, segmentary, tegumentary, tunicary* (anat.), *societary, evolutionary, documentary, sedimentary, rudimentary* (19th c.), *inflationary* 1920.

A number of words have more or less usual counterparts in *-al* (*provisional, segmental, traditional, textual, visional, fractional, insurrectional* a.o.). The difference is that the *-al* word merely means 'pertaining to, connected with . . .' whereas the *-ary* word connotes the idea of tendency or purpose. *Fractional* means 'of the nature of a fraction', *fractionary* 'tending to divide into fraction', *insurrectional* 'pertaining to insurrection', *insurrectionary* 'addicted to insurrection'.

The sf involves no shift of stress except with derivatives from trisyllabic or longer sbs in *-ment*. Here the stress pattern is that of *élement/èleméntary, devélopment/devèlopméntary.*

4. 14.   -ate /ɪt, et/ (type c o n s u l a t e)

is ultimately L *-atus*, a denominal sf meaning 'office, function, institution of . . .', as found in AL *consulatus, magistratus, tribunatus, triumviratus,* EL *apostolatus, cardinalatus, episcopatus, pontificatus, patriarchatus, prioratus, pastoratus, diaconatus,* ML *baccalaureatus, comitatus, ducatus, electoratus* 'dignity of a German Elector', *caliphatus, landgraviatus* a.o. With the exception of a few words such as *consulate* 1387, *priorate* 1400 English words are 16th c. and later: *tribunate* 1546, *triumvirate* 1584, *marquisate* 15.. (= F *marquisat* 1507), *pontificate* 1581, *noviciate* 1600 (L), *vicariate* 1610 (L), *patriarchate* 1617, *baccalaureate* 1625, *episcopate* 1641, *generalate* 1644, *cardinalate* 1645, *syndicate* 1624 in sense 'office of a syndic', *electorate* 1675, *professorate* 1860, *pastorate* 1795, *aldermanate* 1875, all with the meaning 'office, dignity, institution'.

The sense 'period of office' is implied in *Protectorate* 'the P. of the Cromwells', *Consulate* 'Napoleon's C.', but is, in principle, possible with other words, too.

Triumvirate 'association of three rulers' attracted *syndicate* 'body of syndics' 1624 H. In the 19th c. this semantic branch of the sf was further developed: *tribunate* 'the French legislative body 1800—1807', *episcopate* 1842 H, *directorate* 1837, *syndicate* 'combination of persons for the promotion of an enterprise' 1865 H, *electorate* 1879 H, *professorate* 1860 = *professoriate* 1858.

The sense of 'dominion, territory' (which was strong in ML: *ducatus, comitatus* etc.) is weak in English. Exs are *caliphate* 1614 and more recent words coined after it, as *khanate* 1799, *sultanate* 1879, *imamate* 1727, *emirate* 1863,

though the chief sense is that of 'dignity, institution' which is the only one possible with *khedivate, khediviate* 1880 (as *khedive* was a title only).

Though words in *-ate* are originally mere renderings of Latin words in *-atus*, *-ate* is now to be regarded as an English sf (wfnb). For 19th c. coinages, at least, a Latin original need no longer be assumed, though it may exist (as ML *aldermannatus* which the OED gives as the etymology for *aldermanate*; but *aldermanate* is obviously coined after older words of the same kind, without regard to the ML word).

4. 15.   -ate /ɪt/ (type p a s s i o n a t e)

After the pattern of *proportionate* 1398 (= LL *proportionatus*), *passionate* 1450 (= ML *passionatus*), derivatively connected with *portion, passion*, a few other adjs have been formed with the sf *-ate*, as *affectionate* 1494, orig. also 'full of passion' (f. *affection* in the now obsolete sense 'passion', rather than "adaptation of Fr. *affectionné*" OED), *compassionate* 1587, *dispassionate* 1594, obs. *opinionate* 1553—1661, *extortionate* 1789, *notionate* 1859 'full of notions, headstrong' Sc. and AE (it will be noted that all the words end in [šənɪt]).

Companionate 1927, as in *companionate marriage*, is perhaps orig. a sb. Cp. the sentence "birth control has brought the companionate into existence" (q. OED Spl. s.v. *companionate*). It has, at any rate, nothing to do with obs. adj *companionate* 1657.

4. 16.   -ate /et/ (type a c e t a t e)

The sf *-ate* derives chemical terms on a NL basis of coining, chiefly names of the salts and esters formed from those acids whose names end in *-ic*, as *acet-ate* 'a salt or ester of acet-ic acid'. Exs are *caprate, citrate, crenate, cyanate, ilicate, iodate, lactate, lithate, nitrate*. English coinings are not older than the last decade of the 18th c. Historically, the sf is again the anglicized Latin ptc *-atus*, originating in cbs such as *plumbum acetatum* 'acetated lead, lead treated with vinegar', by way of clipping *acetatum* (as a primary).

4. 17. 1.   -ate /et/ (type t r a n s l a t e)

is an adapting termination with verbs, chiefly used to anglicize Latin verbs in *-are*. Latin second ptcs in *-atus* were adapted in Middle English long before any other verb forms came into use. From about 1300 we find forms such as *translate, create, ordinate* to render L *translatus, creatus, ordinatus*. The adoption of French ptcs had preceded (*depeint, deskumfit* 1225). The latest treatment of the subject is that by Ole Reuter: On the Development of English Verbs from Latin and French Past Participles, Helsingfors 1934, Societas Scientiarum Fennica, Commentationes Humanarum Litterarum VI. 6 on which the following is chiefly based, though I differ in the interpretation of Reuter's material.

4. 17. 2.   In the process of derivation from French and Latin ptcs three tendencies were at work: the first was to reconcile the function of those loans with the form prevalent with native words of the same function. The English

'morpheme' for second ptcs (in the majority of cases, i.e. with 'regular' verbs) was -ed, so this ending was early added to such borrowed ptcs, as in *circum-cised* 1250, *painted, conclused* 1300, *professed* 1315, *desolated* 1382, *incorporated* 1398 a.o. The corresponding present stems naturally came to end in -t resp. -ate. On the other hand, the final t of the foreign ptcs was also apprehended as characteristic of the second ptc and the preterite. Reuter cites present tenses such as *compack, corrupe, rap, redemp,* from *compact, corrupt, rapt, redempt.* But this analysis cannot have represented the general tendency as this kind of back-derivation would not have led to -ate, but to [e]. The third tendency was that which derived on the analogy of certain native verbs. There was a group of native verbs whose ptcs ended in -t, too, and which were homophonous with the present and infinitive stem, as cut, *burst, let, put, set, shut, slit, split.* This parallelism had far-reaching results. On the analogy of native verbs where present, preterite and second ptc had one form, verbs of foreign proven-ance were treated in the same way, so we find *anoint, discomfit* etc. as present, imperative or infinitive forms. Ole Reuter's book shows that this derivational pattern was prevalent from about 1225 to 1475. It is only toward the end of the 15th c. that the victory of -ed ptcs, i.e. derivation following tendency 1), is definite. Ptcs of French and Latin origin with a final t were used as ptcs and even preterites in English without the addition of -ed. "Exactly as we have the infinitives *cut, split,* etc. corresponding to the past participles *cut, split,* etc., I think such infinitives as *discomfit, attaint, convict, direct* have been formed on the past participles *discomfit, attaint, convict, direct*" (Reuter 132).

4. 17. 3.   Almost all the facts are in favor of Reuter's theory: most of the re-corded ptcs occur earlier than the corresponding infinitives, most of them occur unextended, and many are also used as preterites (see Reuter 71 and 132—134). There is, however, one difficulty which does not seem to have occurred to Reuter. If his theory is right, it is difficult to understand what caused this derivational process which was prevalent for about 250 years to give way to the type illustrated by tendency 1). If up to 1475 ptcs were con-verted into present and infinitive stems, we hardly understand why ptcs and preterites were so suddenly formed with the ending -ed. Reuter does not en-lighten us on the subject. He only says that "in the long run, however, they were not put on the same footing as the short native verbs *cut, hit, set,* etc., but conformed to the majority of English verbs, and -ed began therefore gradually to be regularly added in the past tense and the last participle" (127—128). In Caxton's works the balance is already clearly in favor of -ed (see Reuter 86—87 and 128—129). That the influence of *cut* verbs has played a part cannot be denied as many -t ptcs were used as preterites. But the number of such unextended preterites is incomparably smaller than that of the forms used as ptcs. This seems to weaken the theory of parallelism as the analogy of *cut* verbs should equally have worked for the preterite.

4. 17. 4.   Reuter overstates the case of unextended non -t ptcs: they are not as frequent as unextended ptcs in -t, though there are quite a number of them. Gower, for instance, has 9 unextended -s ptcs against 2 with the ending -ed.

Several other cases of extended -*s* ptcs are explained by the fact that the full verb is derived from a French verb in -*s*: F *annexer, compresser, empresser, fixer, opposer, disperser* naturally came to end in -*s* in English, so ptcs ended in -*ed*. They are not necessarily derived from *annexus, compressus, impressus, fixus, oppositus, dispersus*. Reuter himself admits that the French verbs have probably played a part (136). It is perhaps not wrong to assume that the use of foreign -*t* ptcs without the ending -*ed* was a literary tendency with certain writers rather than a reflection of common usage. Most of the documents Reuter has studied have a learned character or are translations. The tendency which is not reflected in the documents, was probably from the beginning to add -*ed* (i.e. tendency 1). The existence of early extensions is borne out by Reuter's material (see above), but somehow the connection with the later development is lacking in Reuters' book, as he is mainly interested in unextended foreign ptcs used as infinitives and present tenses.

4. 17. 5.   There is another factor that has probably played a greater part than Reuter seems ready to admit, though he does not overlook the factor (136). The existence of deverbal sbs in -*tion, -ation* seems to me to be a more important factor than is generally recognized. For recent times the process of back-derivation is generally admitted (see below). Why should not the same kind of derivation, at least as a helping factor, be assumed for the early stages, too? Latin deverbal sbs in -*atio* were anglicized as ending in -*acioun, -ation*, pronounced [atsion], so there is no phonetic difficulty. We have an almost exact parallel in the pairs -*ate/-acy, -ant/-ancy* (see sfs -*acy, -ancy*). A great number of Reuter's earliest exs of -*ate* verbs are accompanied by older sbs in -*ation*, and the coiner of the verb, who knew Latin well, surely had the Latin sb in mind (many of the 14th c. works are translations from Latin), even if this had not been anglicized.

4. 17. 6.   The earliest instance of a full verb in -*ate* appears to be *consecrate* 1387, followed a little later by *sophisticate* and *prostrate* 1400; (note that the Latin infinitive to *prostratus* is *prosternere*). Many appear in the 15th c., as *abbreviate, allegate, alleviate, approbate, create, contaminate, connotate, dedicate, determinate, deflorate, desolate, equate, frustrate, inoculate, incorporate, mitigate, ornate, preparate, provocate, recreate, separate, terminate, transfigurate* a.o. (see Reuter).

4. 17. 7.   While in the earlier stages the ptc is usually recorded before other verb forms, more than 47 per cent of all new verbs coined in the 16th c. appear in the present from the beginning (Reuter 106/107). This means that -*ate* verbs are no longer back-derivations from ptcs, but -*ate* has become an established formative in its own right. The 16th c. and still more the first half of the 17th c. were very productive, but many formations are dictionary or nonce words (cp. Reuter's lists 93—106 and 112—121). Word-coining in the second half of the 17th c. and in the 18th c. was, as is to be observed with English wf in general in those periods, rather unproductive, but the 19th c. has coined many scientific or technical words, as *causate, cremate, exsanguinate, mutate* a.o. (see Reuter 124—125), sometimes wrongly adapting, as *micturate* 1842 f. L *micturire*.

4. 17. 8.   -ate lost its original character as early as the 16th c. and began to be used freely as a sf to derive verbs from Latin nominal stems, when no Latin verb existed. After *felicitate* (which was backed by L *felicitare* and *felicitas*) were formed other vbs, such as facilitate, *capacitate, debilitate*, obs. *fertilitate, facultate, connubiate, foliate, paginate* for which the possible existence of a Latin verb sufficed. This process is common today in scientific terminology where we use words such as *chloridate, glycerinate, chlorinate, benzoinate,* 'combine, impregnate, treat with ...', many with the prf *de-*, as *decapsulate, decaudate, defibrinate, dehydrate, delaminate, denitrate* etc. Non-scientific are *orchestrate, hyphenate* AE, freely derived from sbs. The sf here has a mere functional value (as do often L *-are*, F *-er*, G *-ieren*). In some cases a word may render a French word in *-er*, as *assassinate, isolate, ameliorate, diagnosticate, marinate, orientate, vaccinate*. Back-derived from sbs are *cavitate, cerebrate, co-educate, commentate, demarcate, orate* (in recent American English 'speak like an orator'), *reparate, valuate, legislate* a.o. Derivation from non-Latin or non-Romance sbs is exceptional. *Phonate* 1876 is isolated.

4. 17. 9.   The adaptational use of *-ate* came too late to oust such Latin *-are* verbs as had been introduced before *-ate* became established as a formative. As Latin verbs in *-ificare* had fallen together with *-efy*, *-ify* loans from French, this group has always regularly been adapted in *-ify*. Latin verbs in *-izare* likewise came into English through the medium of French and had by the 14th c. become established as *-ize* verbs in English. Occasional *-ate* verbs are *baptizate, inthronizate, martirizate, pulverizate, deificate, diversificate, edificate, sanctificate, vitrificate, vivificate*, coined before 1500 and obs. now. Rare modern words are *nidificate* 1816, *specificate* 1620, *stabilizate* 1909.

Owing to its learned tinge, the sf has been used in facetious slang words, as *bibulate* 'drink', *quitate* 'leave college before graduation', *absquatulate* 'decamp', *discombobulate* 'discomfit', *tittivate*, earlier *tiddivate, spifflicate* 'treat roughly' a.o., many of them not clearly etymologizable.

For the question of doublets (t. *comment/commentate*) cp. Ole Reuter, Verb Doublets of Latin Origin in English, Helsingfors 1936, series quoted above VIII. 4. Cp. also Jespersen in Englische Studien 70. 121 ff. and Koziol in Anglia 65. 58 ff.

4. 17. 10.   Words of two syllables whose first syllable is long (through vowel) or closed (through consonant) tend to be stressed on the first syllable (*frustrate, stagnate, ornate*). The tendency is especially strong in AE where the vowels of the first syllable are often changed as against BE usage so as to make the stress possible (*cremate* with [i], *rotate, locate* with [o], *orate* with [o], *vacate* with [e]). If the vowel of the first syllable is short, the last syllable is stressed (*create, narrate, rotate* BE, *locate* BE). In words of more than two syllables the stress is now predominantly on the third from the end (formerly *demónstrate, compénsate, condénsate*; still common or heard are *confíscate, demárcate, defálcate, illústrate*, while *remónstrate* is never stressed on the first) unless they are derived on a native basis (*glýcerin-ate, bénzoin-ate* a.o.) or analysed as derivationally connected with other words (*stábilizate* fr. *stábilize, órientate* fr. *órient*).

4.18.1. -átion /'ešən/

anglicizes L -*atio* as well as (learned) F -*ation*, but is now largely an in-
dependent sf with impersonal deverbal sbs. How far the English words are
influenced by French patterns is often difficult to tell, as most of the words
exist both in Latin and French. In some cases we can check the origin. *Ex-
portation* of which the OED says that it is 'ad. French' is certainly not French
as the French word is first recorded in 1734 whereas the English word is dated
back to 1610. The pattern is either L *exportatio*, or *exportation* is an English
derivative.

Formally we can distinguish four groups: 1) sbs which go with verbs in
-*ify*; 2) sbs which go with verbs in -*ize*; 3) sbs which go with verbs in -*ate*;
4) sbs which are accompanied by an unsuffixed verb.

4.18.2. In the 14th c., English adopted Old French word pairs such as
edify/edification, *justify/justification, purify/purification*. On the pattern
of these pairs English derived sbs from older -*ify* verbs. The derivational
character of the English sbs is not impaired by the fact that almost every
word has a Latin or French counterpart as well. Exs are *certification, glori-
fication, ratification, rectification, pacification* (15th c.), *amplification, modi-
fication, sanctification, verification* (16th c.), *identification, magnification, vili-
fication* (17th c.). Outside this group of learned words is *jollification* 1798 for
which there is, of course, no Latin pattern. Other colloquial verbs (*argufy*
etc., see -*ify* sf) have not, however, developed sbs in -*ification*. The phono-
logical opposition is [ɪfaɪ/ɪfikešən].

4.18.3. On the analogy of organize/organization, *canonize/canonization,
martyrize/martyrization, moralize/moralization* (15th c. and older) the language
formed sbs from -*ize* verbs, apparently beginning with the 17th c. It is possible
that Neo-Latin influence has also played a part, but French seems excluded,
as many words have apparently never existed in French (if their absence in
Littré, Dictionnaire Général, FEW is to be interpreted in this way), such as
formalization, familiarization, bastardization a.o., or are recorded later than
their English counterparts (*catechization* 16.., F 1787 FEW, *colonization* 1770,
F 1800, *civilization* 1704, F 1766). We may therefore assume that sbs in -*ization*
are derivatives from -*ize* verbs from about 1600 on. Exs are *authorization,
catechization, evangelization, pulverization, formalization* (17th c.), *colonization,
temporization, civilization, brutalization, familiarization, humanization* (18th
c.), *centralization, atomization, christianization, bastardization, fertilization,
demonetization, Germanization, Anglicization, Latinization, fossilization, le-
galization, neutralization* (19th c.). The phonological opposition is [aɪz/ɪzešən]
or [aɪz/aɪzešən]. The former is preferred in AE, the latter prevails in BE.

4.18.4. Sbs in -ation which go with verbs in -ate, are, as a rule, older than
the verbs (see -*ate* sf). ME sbs in -*ation* are loans from French or Latin, as
altercation, creation, *constipation, contemplation, expurgation, constellation,
incarnation, moderation, modulation, translation* (before 1400), *accumulation,
intimation, situation* (15th c.). Later words also have French patterns, as
education 1531, *saturation* 1554, *alternation* 1611, *intimidation* 1658, *consterna-
tion* 1611, *affiliation* 1751, but the English words may be derivatives from -*ate*

ptcs or full verbs, too. For *authentication* 1788 no French pattern appears to exist, nor have I found one for *ruination* 1664 which may be derived from *ruinate*.

4. 18. 5.   Exs of group 4) are *damnation, restoration, accusation, commentation, taxation, temptation, vexation, information* (ME), loans from Latin or French. The corresponding verbs are also loans, representing OF verbs in *-er*. Later loans are *alteration* 1482, *defraudation* 1502, *relaxation* 1526, *derivation* 1530, *affectation* 1548, *affirmation* 1533, *quotation* 1532 a.o. All these were accompanied by older unsuffixed verbal loans, and *-ation* sbs came to be apprehended as direct derivations from them.

A few instances of PE verbs analysable after the pattern a b s e n t / a b s e n t a-
t i o n are *adaptation, adjuration, administration, adoration, affectation, afforest-ation, alteration, annexation, assentation, augmentation, defraudation, deforest-ation, deformation, demarkation, deportation, detestation, disputation, expecta-tion, exploration, exportation, exultation, forestation, reforestation, frequentation, votation, vexation, visitation.*

There are also some derivatives from native verbs, as *flirtation* 1718, *starva-tion* 1778, *botheration* 1801, the stock-exchange term *backwardation* (after *retardation*). *Jobation* 1687 is no longer felt to be a derivative in the original sense, as the vb *jobe* is obsolete, but it may be connected with *Job* from which the vb was derived anyhow.

The sf is, however, used with a number of colloquial, jocular or vulgar words such as *flust(e)ration, twitteration, worryation, darnation, murderation, splatteration, thunderation, furiation* (infl. by *indignation*), *flinderation* 'state of being in flinders or fragments', *fudgetation, quiration* 'inquire', *twistification* 'a country dance' (see ADD), coined as mock-learned words. On the other hand, ridiculing criticism of the growing use of the learned sf is old as a quo-tation from the 17th c. in the OED (s.v. *-ation*) shows: "But what languages do they speak, servant? — Several languages, as Cawation, Chirpation, Hootation, Whistleation, Crowation, Cackleation, Shriekation, Hissation."

4. 18. 6.   As *-ation* is a deverbal sf, there is usually a verb which goes with the sb. Occasionally, however, *-ation* is a sf in its own right, deriving a sb from a virtual verb. Exs are *sanitation* 1848 (the vb *sanitate* is back-derived from it, first rec. 1882), *sedimentation* 'deposition of a sediment' 1874 (app. no vb recorded).

As for the meaning, *-ation* falls into the group of impersonal deverbal sbs with their various semantic possibilities (see esp. *-ment* sf). Sbs in *-ation* do not, however, denote concrete things.

4. 19.   -by /bɪ/

has formed a few now archaic or obsolete words denoting persons, originally coined as words with a zero determinatum, '(man from) Littleby', then re-interpreted as consisting of the determinant *little* and the determinatum *-by*. The sf originally forms place names, as *Whitby, Grimsby, Littleby* etc., and after place names used as surnames were coined such words as obs. *suresby, sureby* 'p. that may be depended upon' (1553—1675), *rudesby* (now arch.) 'insolent fellow' 1566, *sneaksby* (now rare) 'mean fellow' 1580, obs. *idleby, idlesby* 'idle fellow, loafer' 1589, *wigsby* 'p. wearing a wig' (joc.) 1785. Cp. *-ton* sf.

4. 20. -cy /sɪ/

On the analogy of the phonetically related alternation -ate/-acy (4. 3) and -ant/ -ancy (4. 9) the language has formed a few sbs with the sf -cy (in -lcy, -ncy, -tcy only). Like -ancy and -acy from which -cy has resulted in a somewhat irregular way, -cy denotes state or position, particularly a position connected with certain privileges or a fixed revenue. No coinages appear to have been made before 1700. From the 18th c. are chaplaincy 1745, cornetcy 1761, ensigncy 1767, colonelcy 1797. Later are baronetcy 1812, captaincy 1818, chieftaincy 1817, generalcy 1864, brevetcy 1846, aldermancy (rare, no date in OED).

With the meaning 'state', but without the nuance underlying the preceding group, are formed bankruptcy 1700 (after insolvency; some speakers do not pronounce the final -t of bankrupt in bankruptcy, but the phonetic pattern has not extended to other derivatives from a root in -t as cornetcy and baronetcy show) and the word normalcy 1857, chiefly AE.

4. 21. 1. -dom /dəm/

is a sf which has congeners in all Germanic languages except Gothic. In OE it still exists as a substantive (dōm) with the meaning 'jurisdiction, state, statute', the same as we have in PE doomsday. In OE it formed cpds with adjectival first-words, such as frēodōm, wisdōm, hāligdōm 'relic'. The type was weak, and as far back as OE composition with substantival first-words is the prevalent type of derivation.

4. 21. 2.   From OE are recorded such words as þēowdōm 'serfdom', dryhten- dōm, campdōm / alderdom, bishopdom, Christendom, earldom, heathendom (according to OED revived about 1700 as the opposite of Christendom), king- dom, martyrdom, masterdom, popedom which in OE had only the meaning 'state, dignity, jurisdiction, authority of . . .'. ME are dukedom, sheriffdom, thraldom, whoredom. From the 16th c. are recorded archdukedom, heirdom, patriarchdom, priestdom, princedom, from the 17th c. birthdom, motherdom, queendom, peerdom, squiredom, mayordom, peopledom, churchdom, cuckoldom, devildom, from the 18th c. we have awaredom, puzzledom, sachemdom 'position of a sachem'.

4. 21. 3.   In ME the sf developed the sense 'territory' with a few words, as Christendom, dukedom, earldom, kingdom. The meaning 'collectivity of . . .' is also ME. By 1800 the sf had acquired the additional tinge of depreciation, satire, mockery. This development had probably started with the word whoredom which, as a biblical word (Hosea I. 2), could not fail to play an important role in the sense-development of the sf. Words coined before 1800 with a depreciative tinge are cuckoldom, devildom, thraldom. On the other hand, we have such words as earldom, dukedom, peerdom, princedom which conveyed the idea of high standard and titular pretense.

4. 21. 4.   The sf is now very productive, though most of the words are slightly humorous and not exactly recognized as standard vocabulary. This productivi- ty is the result of a revival. Carlyle, inspired by German words in -tum, has

played a great part in promoting the sf. He coined such words as d u n c e d o m , *philosophedom, rascaldom, Saxondom, scoundreldom, tinkerdom*. Other writers followed.

In principle, the sf has preserved the old senses 'status, realm, collectivity', if somewhat changed. The neutral shade of 'status' is no longer the leading one. Most words coined on this semantic basis imply disparaging criticism. Carlyle's *duncedom, rascaldom, scoundreldom* have a pronounced pejorative character. Other depreciative coinages of the early 19th c. are *cockneydom, noodledom, savagedom, thugdom*. Later are such words as *attorneydom, bourgeoisdom, bumbledom, bunkdom, brutedom, caucusdom, cliquedom, corpsedom, crookdom, curdom, dandydom, flapperdom, fogeydom, gangdom, gangsterdom, loaferdom, nazidom, pariahdom, pauperdom, ruffiandom, sovietdom, suckerdom*.

4 21. 5. The neutral shade 'status, condition' is contained in such words as *caesardom* 1861, *czardom* 1841, *monkdom* 1862, *pagedom* 1852, *rebeldom* 1859 (Thackeray), *saintdom* 1842, *sheikhdom* 1845, *tinkerdom* 1834 (Carlyle), *stardom* 1865 (frequent since about 1915), *authordom, bachelordom, wifedom* and perhaps some others.

4. 21. 6. The literal meaning 'territory, domain, region' occurs with such words as *czardom* 1841, *Gaeldom* 1860, *jarldom* 1820, *mormondom* 1886 H, *negrodom* 1860, *rebeldom* 1862 (much used in the American Civil War), *sheikhdom* 1845. But the chief function of the sf in this sense group is to form words with the figurative meaning 'land, world of . . .', as b o y d o m , *butlerdom, crossword-puzzledom, dolldom, dreamdom, fairydom, fandom, flowerdom, gipsydom, ladydom, mammondom, oildom, schooldom, taxidom* a.o. Such cbs may also denote the 'inhabitants' of this 'land' (esp. derivatives from personal sbs), characterizing them as a community, fraternity, a certain class with its ways: *artistdom, beggardom, negrodom, parsondom, professordom, scholardom, spinsterdom, swelldom, teacherdom, yankeedom*.

4. 21. 7. A sense variant of the preceding group is that of 'group united by a common interest', especially found with cbs belonging to certain semantic fields, as sports, movies, the theatre. The group is chiefly American English. Though there are a few coinages before 1900, as *theatredom* 1889, *turfdom* 1864, the type has grown strong in the last 30 years only. Exs are *athleticdom, autodom, baseballdom, bookdom, fandom, filmdom, footballdom, fraternitydom, golfdom, moviedom, newspaperdom, picturedom, playerdom, ringdom, screendom, sportsdom, stagedom, traveldom*.

Added to names of animals with meaning 'world of . . .' we have the sf in *dogdom* 1854 (humorous then), *catdom* 1888, *puppydom* 1891 H, the recent AE words *cattledom, cowdom, horsedom, micedom*.

4. 21. 8. The sf is especially productive in American English. It may be that the influence of German has played a role (cp. also AE *-fest* which is likewise due to German influence). The influence of German is clearly observable in translation loans such as *Manchesterdom* 1882, *junkerdom* (frequent in World War I), *Kaiserdom, Germandom* (1933), *folkdom* 1939 (the word *Volkstum* was a famous propaganda term of the nazis).

4. 21. 9.   A few derivatives have been made from predicative adjs, as *aware-dom*, *topsy-turvydom*, and from vbs, as *listendom*, perh. also *boredom*, if this is not from the conversion sb *bore*. From the pronoun arises *selfdom* 1863.

The sf *-dom* sometimes recalls *-ism* with depreciative words. Cp. *gangsterdom/gangsterism*, *Nazidom/Nazism*, *attorneydom/attorneyism*. In such cases, the *-ism* word denotes the system, doctrine whereas the *-dom* word is more concrete, signifying the collective body of people representative of . . .

4. 21. 10.   As the latest study of the sf, there is a paper by Harold Wentworth: The allegedly dead suffix *-dom* in Modern English (PMLA vol. LVI. 280—306), which has superseded earlier studies by L. Pound and J. M. Burnham. Wentworth is chiefly interested in the history of *-dom* since 1800, and he has collected about 300 words coined after 1800. Most of my exs are from Wentworth's article, but the arrangement here is mine. W. does not treat the semantic side of the problem.

4. 22. 1.   -ed /t, d, ɪd/ (type f e a t h e r e d)

-e d appears as [t] after voiceless cons., as [d] after voiced cons. or vowel, as [ɪd] after a dental. It forms possessive adjs with the basic meaning 'provided with . . .'. It is common Germanic. Though the OED distinguishes between the sf and the participial ending *-ed*, both have probably one origin, as they can be traced back to Indo-European *-to* (cf. L *dentatus*, *pinnatus*, *lanatus* / *amatus*, *laudatus* etc.). OE instances are *hringede* 'ringed', *bierded* 'bearded', *sceacgede* 'shagged'; other words from the OE period are f e a t h e r e d, *galled*, *hilted*, *stringed*, *saddled*, *shielded*. OE and ME coinages are also found with the prefix *ge-*: *gelandod* 'landed', *gehlidod* 'lidded', *geswurdod* 'sworded', *gewintred* 'wintered' etc., cf. G *gelaunt*, *gesinnt* etc., with which we may compare the more recent type *bespectacled*, in use from the 17th c. on. The sf has been productive at all times, chiefly with concrete, less often with abstract sbs. Exs are *cheered*, *cornered*, *crested*, *eared*, *fleshed*, *footed*, *horded*, *hosed*, *jointed*, *landed*, *languaged*, *lettered*, *measled*, *mitred*, *moneyed*, *pillared* (all ME), *cheeked*, *conceited*, *featured*, *fingered*, *looped*, *palsied*, *roofed*, *shelled*, *spirited* (16th c.), *dropsied*, *fanged*, *hinged*, *hopped*, *iced*, *intelligenced*, *jaundiced*, *kingdomed*, *leisured*, *lilied*, *liveried*, *partitioned*, *pebbled*, *planked*, *propertied*, *qualitied*, *spectacled*, *wooded* (17th c.), *crutched*, *cultured*, *flavored*, *frenzied*, *grassed*, *idead*, *imaged*, *intellected*, *ivied*, *keyed*, *pronged* (18th c.), *gabled*, *irised*, *kilted*, *moted*, *nerved*, *sclerosed* 'affected with sclerosis' (19th c.).

4. 22. 2.   There are many cbs with *well* for a first-word, of the type w e l l-m a n n e r e d. These cbs are not cpds, but free syntactic groups. I mention them as a special type because without *well* the words are unusual. Each member has its own heavy stress, except in preadjunctal position where the second member shifts its heavy stress to middle stress. The earliest recorded exs are *well-weaponed* 1250, *well-boned* 1297, *well-lettered* 1303. Later come cbs such as *well-behaved*, *well-bodied*, *well-breathed*, *well-conditioned*, *well-demeaned*, *well-disciplined*, *well-flowered*, *well-hearted*, *well-horsed*, *well-intentioned*, *well-looked* (cp. *well-behaved*), *well-minded*, *well-mouthed*, *well-natured*, *well-tempered*, *well-toned*, *well-willed*, *well-groomed*.

4. 22. 3.   With a group of words the meaning is 'having the shape or character of . . .'. These words are chiefly OE or ME, as *hooked* OE, *crooked, ragged*, its ablaut var. *rugged, forked, dogged, crabbed, cragged, wretched, jagged, peaked, knobbed, piked* (*pike* 'point'), *wicked* (all ME), *piped* 1520, *orbed* 1597, *cupped* 1796, *domed* 1775, *snagged* 'ragged, jagged' 1658. With the oldest group of words a phonetic peculiarity is observable. In almost all of them, the sf is pronounced [ɪd] though the radical is monosyllabic which with words of the group meaning 'provided with . . .' is the phonetic rule only when the radical ends in *d* or *t*. *Crabbed, crooked, cragged, ragged, rugged, jagged, dogged, wretched, wicked* have [ɪd] only. This pronunciation *was* rather than *is* morpho-phonemic. Words coined after 1500 never have the pron. [ɪd] but are pronounced like ptcs of the verb. Other old words have the pron. [d] as the first and the pron. [ɪd] as the second possibility, as *hooked, knobbed, peaked* while *forked* has only the pron. [fɔ(r)kt].

4. 23. 1.   -ed /t, d, ɪd/ (type palefaced)

Deriving adjs from cpds, we find the sf in types inkneed / hunchbacked / palefaced / five-fingered / knock-kneed. But with many of the extended bahuvrihi cbs the underlying basis is not a fixed cpd but a syntactic cb. The sf is also frequently tacked on to other syntactic groups, for which we have a variety of types: powdered-headed / bigger-sized / kindest-hearted / no-hatted, unmanned, undermanned, overmanned.

4. 23. 2.   As far back as OE, the bahuvrihi cpds of the types *paleface* and *five-finger* began to take the sf -*ed* which gave the words an outspoken adjectival character (cf. the same adjectivizing tendency in G through *i*- extensions, as *einhändig* a.o.). Extended bahuvrihi cpds have become one of the most prolific adjectival types. The term 'extended bahuvrihi cpds' is to be understood as descriptive of the pattern only. Historically speaking, the cases of suffixed bahuvrihi cpds are few. Most of the underlying themes are not cpds at all, but mere syntactic groups, and the extensions are synthetic cpds, i.e. cpds by right of the pattern only (see 2. 1. 5). Although extensions of bahuvrihi cpds are as old as OE, most of the cbs used today are MoE (a very great number were coined between 1500 and 1650). Extensions of the type *hunchback* are MoE. Only a few cbs go back to OE, as *one-edged, two-edged, one-eyed, three-footed, three-headed*. From ME (14th and 15th c.) are recorded *heavy-handed, heavy-hearted, high-hearted, ill-tongued, ill-mannered, ill-mouthed, proud-hearted, simple-hearted, long-lived, left-handed, light-footed, light-handed, light-hearted* / *three-shafted, three-cornered, three-edged, three-leaved* (-*leafed*), *two-footed, two-handed*.

I now give a small selection of examples.

4. 23. 3.   T. palefaced (coinages are practically unlimited in number): *broad-limbed, bare-legged, black-haired, cruel-hearted, heavenly-minded, heavy-handed, heavy-headed, hard-fisted, hard-handed, hard-hearted, hard-headed, high-handed, high-mettled, high-minded, high-pitched, high-spirited, high-toned, hollow-eyed, hot-blooded, hot-headed, kind-hearted, large-handed, large-hearted, long-breathed, long-eared, long-headed, low-browed, low-spirited, mad-brained,*

many-headed, many-sided, mealy-mouthed, narrow-eyed, narrow-minded, open-eyed, open-handed, open-hearted, public-spirited, raw-boned, short-lived, short-sighted, single-handed, solid-hoofed (-hooved), strong-headed, strong-minded, sweet-scented, swift-footed, thick-headed, wrong-headed.

4. 23. 4.   The first-word is a second ptc in po w d e r e d - h e a d e d, *mottled-faced, carved legged*. Jespersen has *rawboned-faced* (i.e. the type as first-word), *opened eyed, cocked-hatted*. This group is weak.

The first-word is the comparative or superlative form of an adj in b i g g e r - s i z e d, *better-featured, flatter-cheeked, prettier-colored* / k i n d e s t - h e a r t e d, *sweetest-tempered, lightest-hearted* (these and other exs in Jesp. VI. 24. 18).

Sometimes we find cbs with adjectival pronouns as first-words: n o - h a t t e d (Wells). Jesp. has *what coloured, what aged, same shaped* from Rose Macaulay and others. This type is literary.

4. 23. 5.   Type h u n c h b a c k e d. The earliest example seems to be *prick-eared* c 1420 (*prick* understood as something pointed), but other exs are MoE only. Exs are *bow-legged, coal-eyed, cone-shaped, canary-colored, eagle-winged, eagle-eyed, cock-eyed, heart-shaped, hen-hearted, chicken-hearted, hare-brained, honey-mouthed, honey-tongued, hump-backed, hunchbacked, iron-handed, iron-hearted, milk-livered, pidgeon-toed, pig-headed, pot-bellied, rat-tailed, ring-necked, ring-tailed, spindle-legged, swallow-tailed, metal-edged, razor-edged, hook-shaped, shovel-hatted, gold-laced, gold-headed, snuff-colored, metal-visaged, purple-pointed, silver-belted, air-minded, crime-minded* etc.

4. 23. 6.   The type f i v e - f i n g e r e d is very productive. Exs are *one-eyed, one-eared, one-handed* etc., *two-faced, two-forked, two-headed, two-leaved, two-legged, two-parted, two-sided* etc., *three-legged, three-sided* etc., *four-footed, five-bulbed, eight-locked, eight-angled, eight-celled* etc., *nine-eyed, nine-circled, nine-cornered* etc., *ten-acred, ten-footed, ten-horned* etc., *twelve-banded, twelve-gated* etc., *twenty-breeched, twenty-colored*. As a matter of course, the lower numbers are much more common.

4. 23. 7.   Type k n o c k - k n e e d. The first-word is a verbal stem, i.e. cbs are extensions of t. *rattlesnake* words. Their number is limited. *Mope-eyed* 1606 (*mope* 'be bewildered') 'purblind, short-sighted', *lopsided* 1711 (orig. said of ships), *knock-kneed* 1774, *draggle-tailed* 1654 (Dickens has also *draggle-haired* coined after it), *crack-brained* 1634, *crack-headed* 1796, *shatter-brained* 1727, *scatter-brained* 1804 (the four last have by-forms without the sf), *sway-backed* 1680 (said of a horse) 'having a downward curvature of the spinal column' (the OED suggests Scandinavian origin, but the cb is quite naturally explained from *sway* 'bend downwards etc.', as by weight or pressure, sense recorded since 1577), *stumble-footed*.

4. 24. 1.   **-e e** /i/

With the Norman conquest, French became the language of the law courts. Although by the decree of 1362 English was officially established as the language of jurisprudence, French continued to exercise a dominant influence, and legal English was for centuries little more than anglicized Law French.

There existed in AF word pairs such as d o n e e / d o n o r, *feoffee/feoffor*, *lessee/ lessor* which, in an English context, do not occur before the 15th c.: *donee 1523/donor 1449*, *feoffee 1411/feoffor 1440*, *lessee 1495/lessor 1487*. The sb in *-ee* is a passive noun (orig. a substantivized French second ptc), the sb in *-or* is the agent noun. In the preceding pairs the sense relation is that of 'one to whom something is given' / 'one who gives'. The *-ee* sb, syntactically speaking, is thus the indirect or prepositional object of the verb. Exs belonging here are *assignee 1467* H, *committee 1495*, *appellee 1531*, *debtee 1531*, *grantee 1491*, *vendee 1547*, *recognizee 1544*, *mortgagee 1584*, *depositee 1676*, *obligee 1559*, *pawnee 1683*, *referee 1621*, *trustee 1647*, *transferee 1736*, *payee 1758*, *petitionee 1764* (U.S. law), *drawee 1766*, *abandonee 1848*, *scripee 1909* (U.S. law) 'one to whom land is allotted by scrip'.

4. 24. 2.   Though *-ee* sbs were originally coined as counterparts of *-or* sbs, they subsequently came to be associated with the underlying English verbs, and from the 17th c. on we have direct derivation from infinitives (t. *drawee* fr. *draw*), as the preceding exs show. Many could also be connected with their bases understood as sbs, which explains c h a r g e e 'holder of a charge upon property' 1884, formed after *mortgagee* analysed in a similar way and *patentee* 1442, orig. 'one to whom letters patent have been granted'.

4. 24. 3.   In AF, there were also passive sbs which syntactically would be the direct object of an active verb. Of this type (which Elna Bengtsson, Studies on Passive Nouns in English, Lund 1927, calls 'direct passive nouns', as contrasted with the 'indirect passive nouns' of the above group) are words such as *ordinee* 'ordained clergyman' 1330, *assignee* 'deputy' 1419, *presentee* 1498, *nominee* 1664, *appointee* 1768.
    The group of direct passive nouns has recently come into favor esp. with words of official military jargon. Exs are *draftee* (World War I word), *selectee*, *enlistee*, *trainee*, *rejectee* (RD 44. 5. 105), *evacuee* (about 1939, coined without *-ate* like *nominee*, *congratulee*). The suffix is a vogue morpheme which has formed many words of a more general application in present-day American English. But many of these have a playful nuance and a decidedly transitory character. A few examples are *divorcee*, *seductee*, *slanderee*, *honoree*, *internee*, *rushee*, *educatee*, *laughee*, *congratulee*, *visitee*, *holdupee*, *pollee*, *quizee*, *squeezee*. An older word of the type is *invitee 1837*.

4. 24. 4.   A few words have a non-passive character. *Conferee* 'one who takes part in a conference' is coined in phonetic imitation of *referee*. Other words, all AE, are *standee*, *returnee*, *escapee*, *tryoutee* 'one who tries for a position on a competitive basis', *beateree* (with double suffix) 'person or thing that beats all'. Cp. ASp 16 (1941) 306.
    The word *absentee 1537* is explained in the OED as 'f. *absent* v. + *-ee*'. It does not fit the general pattern, as it has not a passive meaning. It may have been coined as Law French from the vb *s'absenter* as F *réfugié* is derived from *se réfugier*.

4. 24. 5.   Unrelated to the sf is *-ee* as found in several words of heterogeneous origin. *Pharisee*, *Chaldee* (both Wyclif) represent L words in *-aeus*. *Pharisee* has an OF pattern *pharise*; for *Chaldee* none appears to be recorded, though it

may have existed. *Brahminee* 1811 is coined after *Bengalee* 1613 which represents native *Bangāli*. *Townee* 1897 'townsman' (as dist. from a member of the university) may be a jocular formation with the lengthened hypocoristic -*y*, -*ie*. The same formation we seem to have in b a r g e e 1666 'bargeman', *goalee* 'goalkeeper', *coachee, coachy* 1790 'coachman', in b o o t e e 'infant's wool boot', *coatee* 'close-fitting coat' 1775, *shirtee* 1818 AE 'shirt-front' (i.e. not a full shirt). A recent coining after the pattern is *spattee* 'kind of legging for women and girls' 1926 (fr. *spat*; influence of *puttee*, pron. ['pʌti], which the OED suggests, is less probable). *Settee* 1760 fits in nowhere, but has attracted *chariotee* 1863. *Muffetee* 1706 'muffler, cuff' is lengthened -*ety* (see sf 4. 80. 8 -*ety*) tacked to *muff*.

4. 25.   -eén /in/

is an Anglo-Irish sf with individualizing or diminutive force. It is Irish diminutive -*in*. Only a few words have been coined, as b u c k e e n 'dandy, dashing fellow' etc. 1793, *squireen* 'petty squire' 1809, *jackeen* 'self-assertive fellow' 1840. The one non-depreciative word is *girleen* 1836.

The main stress is on the sf, except with *girleen* which has forestress.

4. 26. 1.   -eér /ir, ɪə/

is orig. F -*ier* in words borrowed chiefly since the 16th c. For some time -*eer* varied with the form -*ier* from which it has been distinct in spelling since the 17th c. In French words, -*ier* denotes the holder of a profession, but those words which gave rise to the English sf were of a special kind. Early loans are *charioteer* 1340 (a blend of OF *charioteur* and *charetier*) and *engineer* 1325 (OF *engineor* etc.) which were later (17th c.) adapted to the sf. Another loan is *muleteer* 1538 which may have helped to change the Ec *mountainer* 1598 into *mountaineer* 1610.

4. 26. 2.   Other terms belonged to the military sphere, as *pioneer* 1523, *cannoneer* 1562, *bombardier* 1560, *volunteer* 1600 (irr. f. F *volontaire*). *Buccaneer* 1660 (f. *boucanier*) was orig. applied to the French hunters of St. Domingo who also infested the coasts of Spanish America by piracy. The first Ec of this group is p r i v a t e e r 1642, a private volunteer, so to speak, perh. jocularly used for a captain or a ship that held a commission from the government for warlike action, but remained a private person resp. private property. Few other coinages in this semantic field have been made; we may cite the now obs. *blanketeer* 1775, also used for a group of demonstrators in Manchester 1817, and *pistoleer* 1832.

4. 26. 3.   The idea of battle was extended to that of literary and oratory 'battles', and words like p a m p h l e t e e r 1642 and *pulpiteer* 1642 were coined. A derogatory shade of meaning could not fail to become attached to such words, and Dryden's *sonneteer* 1665 is clearly mocking. They were later followed by *garreteer* 1720 'literary hack'. *Gazetteer* 1611 (= F *gazettier*, now *gazetier*), for some time acquired the same tinge of odium as Johnson's explanation shows: "*gazetteer*, it was lately a term of the utmost infamy, being usually

applied to wretches who were hired to vindicate the court". It lost this tinge prob. through its connection with *gazette* 'official journal'. A very new word of this group is *jargoneer* 'jargon-monger' 1913.

There are also words of another description which were formed with a derogatory nuance, as *profiteer* 1797, *crotcheteer* 1815, obs. *waistcoateer* 'low-class prostitute' 1616 'one who pushes his crotchets in politics', *racketeer* 1928 AE.

Jespersen (La 19. 15) would restrict the derogatory shade of the sf to words in *-teer*. But against this are *fictioneer* 1923, *jargoneer* 1913, *sloganeer* rec. AE. On the other hand, *marketeer* 1823 U.S. has no such tinge, though *black marketeer* has, of course.

4. 26. 4. *-eer* is a vogue sf in recent American English with words such as *conventioneer, picketeer, revolutioneer* (joining the 'battle' group above), *packeteer* 'one from the crew of a packet-boat', *chariteer, vacationeer, motorneer* 'trolley motorman', *basketeer* 'basketball player' a.o. which will have to stand the test of time. Priestley uses *pavementeer*. App. without any tinge are *auctioneer* 1708, *clareteer* 1679, *routineer* 1875.

A few words denote inanimate objects, as *gazetteer* 1704, *muffineer* 1806 'instrument for sugaring muffins' (perh. vaguely after F *sucrière*).

4. 27. 1. **-en** /ən/ (type **wooden**)

The sf originally denotes appurtenance (corr. to L *-inus* in *marinus*, cp. also the variants with other vowels, as *-ānus, -ūnus, -ĭnus*). The chief use of the sf is with sbs denoting material, and the adjs derived from them have the meaning 'made of, consisting of . . .' and 'resembling, like . . .'. The first one is preserved today only in dialects where *steelen, tinnen, papern* 'made of steel, tin, paper' a.o. are found (see OED s.v. *-en* suffix[4]). The second sense is the only one current in present-day StE.

4. 27. 2. OE adjs have *i*- mutation: *gylden, liþeren, cyperen, stǣnen, wexen*. But these forms, as far as they survived, were in ME refashioned after the sb: *golden, leathern, stonen, waxen*. Adjs going back to the OE period are also *rushen, treen, wheaten, leaden, silken, brazen* (now no longer felt to be connected with *brass*), *glazen*, refashioned *glassen, beechen, woolen, hairen*. Later were coined *aspen, hempen, ashen* 'made of the wood of an ash', *oaken, oaten, earthen, threaden* (all ME), *birchen* 1440, *flaxen* 1520, *wooden* 1538, *twiggen* 1549, *milken* 1570, *ashen* 'ash-colored' 1808, *larchen, cedarn*.

4. 27. 3. The meaning 'made of . . .' is today preserved in a few StE words only, such as *earthen* (but also in sense 'earthly'), *wooden, woolen, birchen*. With the figurative meaning, more words are in common use: we speak of *a leaden sleep, a wooden head, a silken voice, a golden wedding, a waxen heart, flaxen hair* etc. In the old material sense, sbs used as adjuncts are now the rule. According to OED this tendency set in the 16th c. We now speak of *gold* and *silver watches, leather cases, silk stockings* etc.

4. 27. 4. A few adjs have developed sbs: *hempen* 'hempen cloth' 1777, *aspen* 'asp tree' 1596, *flaxen* 'flaxen material' (sense obs. now, in use 1520—1696). With *linen* and *linden* we have even lost the feeling that they were originally

adjs. *Linen* OE is derived from OE *lin* 'line (obs.), flax', *linden* OE is derived f. OE *lind* 'lime'. *Heathen*, OE *hǣþen* renders L *pag-anus*.

Maiden does not, originally, belong to this group. It goes back to OE *mægden* which is connected with *magu* 'son, man' as its feminine (cp. L *puer/puella*). The sf is the same as in *vixen*. *Maid* is back-derived from *maiden*. Possibly in connection with our adjectival group in -*en*, the word *maiden* developed a tendency to be used in adjunctal function (for a description see Jesp. VI. 20. 44). A parallel development is *lenten* which, from cbs such as *lenten day, lenten fast* became established in adjunctal function, developing *lent* in ME.

4. 27. 5. Of the Indo-European formative -*n*- which underlies -*en* there is an *r*- extension, originating with *r*- stems, as in L *paternus, internus* f. *pater, inter*, then independent as in *hodiernus* f. *hodie*. The English sf is -ern /ə(r)n/ which has only formed adjectives from the names denoting the points of the sky: *eastern* (OE *ēasterne*), *southern* (OE *sūþerne*), *western* (OE *westerne*), *northern* (OE *norþerne*). The derivational relation between the adjs and their bases is fully alive in *eastern* and *western* only. For the others see 4. 1. 22.

4. 28. 1. -en /ən/ (type darken)[1]

This sf is a result of secretion. OE verbal derivatives from nominal stems in -*n* regularly ended in -*nian*, as *fǣgenian* f. *fǣgen* 'fain', *openian* f. *open*, *tācnian* f. *tācen* 'token'. This ending -*nian* subsequently acquired the character of a separate sf, as in Old North. *berhtnian* f. *berht* 'bright', *lācnian* 'heal' f. *lǣce* 'leech', *þrēatnian* f. *þrēat*. OE *fæstnian* is derived f. *fæsten* 'fortress', but was prob. felt to be connected with adj *fæst* 'fast', too. We know nothing about the motives which led to the extension of the sf. There was a similar tendency in Gothic and OHG in the extended sf -*inôn* (see Wi 79), which was, however, arrested subsequently.

The process grew, and later we find *greaten, harden, listen, sicken* (13th c.), *blacken, deaden, gladden, happen, lighten* 'shine', *lighten* 'make light', *meeken, lessen, loosen, quicken, slaken, strengthen, soften, whiten* (14th c.), *thicken, worsen* (15th c.), *bolden, brighten, chasten, cheapen, deafen, fatten, glassen, hasten, heighten, hearten, lengthen, moisten, roughen, shorten, slacken, stiffen, straighten, sweeten, weaken* (16th c.), *deepen, flatten, dampen, freshen, frighten, milden, redden, ripen, sadden, smoothen, widen* (17th c.), all derived from earlier simple verbs. More recent are *brisken, broaden, madden, hoarsen, tighten* (18th c.), *smarten, steepen, tauten, quieten, olden* (19th c.), *neaten* 1898.

4. 28. 2. For the present-day speaker, most of the preceding verbs derive directly from adjs. The development is, however, historical. Jespersen has shown that the verbs in -*en* were not originally formed on adjs, but were up to EMoE extensions of existing verbs. But in course of time, connection with the corresponding adjs came to be felt. It cannot be said with certainty when this feeling arose. But de-adjectival analysis was prob. dominant as early as the second half of the 16th c. (Jespersen takes 1660 as the time limit): *toughen*

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[1] J. Raith, Die englischen Nasalverben. Beiträge zur englischen Philologie, herausgg. v. Max Förster. Heft 17. Leipzig 1931. — O. Jespersen, The History of a Suffix. Acta Linguistica I. 48ff.

is from 1582, but no unextended verb is rec. in OED; *widen* is rec. 1607 and cannot be the extension of the vb *wide* which is not instanced after 1440 in OED.

In all the stages of productivity, only stems ending in a stop or fricative have lent themselves to this type of derivation, and in the last two hundred years, only adjectives in *t* and *d* seem to have been formed, whereas adjectives of a different phonetic buildup derive without a derivative morpheme (type *idle* vb fr. *idle* adj). Cf. 5. 3.

"There are no examples of *n*-vbs formed from adjs in vowels (or diphthongs): *free, blue, low, slow, high, sly, shy, new; narrow, yellow, steady, holy;* nor of such disyllables as *able, noble;* nor of adjs in *m, n, ŋ, r: slim, thin, brown, clean, long, strong, far, poor, near"* (Jesp. VI. 20. 55).

4. 28. 3.   Like other de-adjectival verbs, *-en* vbs express change of state, so *darken* may mean 'make dark' as a transitive-causative vb, or 'become dark' as an intransitive vb.

4. 28. 4.   While the main stock of *-en* vbs have an adjectival basis, there is a group of vbs which are derived from sbs. This has, however, only historical significance and does not bear on the present-day derivational pattern. As *-en* vbs were originally mere extensions of vbs without the sf, it did not matter whether the basis of the vb was an adj or a sb. OE *hlystan* 'list' has a North. by-form *lysna*, and *listen* is common from ab. 1200 (fr. *list* sb, dead since ab. 1400), OE *þrēatian* 'threat' f. *þrēat* also existed in the extension *þrēatnian* 'threaten', while the other OE *-n* extensions (see above) soon ceased to be analysable as such. But as the majority had an adjectival basis, this adjectival element turned out to be important and decisive for new formations. The sf did not become productive with desubstantival bases. As a matter of fact, there is only one desubstantival word from the time when *-en* had become a deadjectival sf with vbs, viz. the vb *frighten* 1666. It was probably coined as the counterpart of *hearten* 1526. Semantic elements may have helped to coin some earlier desubstantival verbs, too. *Threaten* had in OE the meaning 'urge, press', and in ME developed the nuance 'try to influence by using menaces'. This may have led to *strenghten* on the basis 'try to influence by giving (moral) strength'. The original meaning of *strengthen* (14th c.) is, indeed, 'give courage'. Into this group, *hearten* 1526 and its opposite *frighten* fitted easily. On the other hand, the sense 'give strength' made possible the vb *lengthen*, orig. 'give length', i.e. 'eke out', and *lengthen* was followed by *heighten* 1523.

4. 28. 5.   Verbs coined before the 19th c. whose stems end in /ft/ or /st/ drop the /t/ before the sf (for the phonetic side of the problem see Jespersen MEG I. 7. 7, 7. 34—5): *fasten, glisten, hasten, listen, moisten/soften. Swiften* 1839 keeps the /t/.

4. 29.   **-er** /ə(r)/ (type clatter)

forms disyllabic verbs expressive of sound or movement. It is suggestive of reiteration, continuation or the like. To OE go back *clatter, stammer, flutter, flicker, shimmer.* ME are *titter, totter, waver, quaver, shudder, mutter, chatter, batter, glitter, glimmer, clamber* (abl. var. of *climb*), *quiver, jabber.* After 1500 are recorded *flitter, blatter, stutter, sputter, whimper* (16th c.), *snicker, hanker,*

patter, titter 'laugh', *gibber, splutter* (17th c.), *snigger, whinner* (18th c.), *jigger, flecker* (19th c.).

Like many verbs in *-le*, *-er* verbs are not suffixal derivatives. A few words only are historically analysable as root and sf, as *quaver, patter, shimmer* (f. OE *scimian*). *Chatter* is the original from which *chat* was later derived. Words in *-er* are compounds of several symbolic elements one of which is final *-er*. The difference between *-le* and *-er* is small: words in *-er* denote continuous duration, uninterrupted succession of sounds or movement whereas *-le* is more or less suggestive of repeated small acts. But very often, the choice seems dictated by phonetic reasons: an /l/ of the basis excludes *-le* as the final element, an /r/ in the root will not attract *-er* as a final. We say *clatter, flutter, flitter, glitter, glimmer* | *sparkle, spirtle, prattle, wriggle, drizzle* etc.

4. 30. 1.   -er /ə(r)/ (type b a k e r, c o l l i e r)[1]

forms denominal and deverbal sbs designating 'one connected with . . .'. The sf may or may not be L *-arius*. It is not clear whether the denominal or the deverbal function is the original one. The OED and Jespersen hold that the denominal type is original, a view which is borne out by L *-arius* and Goth. *-areis* which form denominal words only (cp. Wi 222). On the other hand, OHG deverbal coinages are much more numerous than denominal ones (cp. Kl/DW 40; see also Henzen 98). Tacked on to verbal stems, the sb forms agent nouns with the meaning 'one who performs an action (once, or habitually)'.

4. 30. 2.   The agent may be animate or inanimate. Examples of personal sbs

are b a k e r, *commander, dancer, driver, gambler, hunter, informer, meddler, mixer, mover, packer, preacher, printer, rider, sponger* 'parasite', *spotter* 'spy', *squatter, stroker* 'one who cures by stroking', *stroller, sweeper, singer, swimmer, tanner, teacher, tawer* 'one who taws white leather', *trafficker, trainer, trapper, traveller, waiter, wanderer, weaver, writer, wrecker* etc. etc.

4. 30. 3.   Words denoting animals are p o i n t e r, *retriever, setter, tufter* 'hound

used to drive the deer out of cover', *skirter* 'hound', *springer* 'spaniel' | *spanker* 'fast-going horse', *trotter* | *scratcher, screamer, tattler, wood-pecker, warbler, washer* (birds) | *shedder, shiner, spawner, thrasher* 'fox-shark' (fish) | *squeaker* 'bird or pig', *sitter* 'bird or hen', *slider* 'an American turtle', *spinner* 'spider', denominally coined *thiller* 'thill-horse' = *wheeler*.

4. 30. 4.   The agent is a device, tool, implement, machine or the like, i.e. a

material but impersonal agent in words like b l o t t e r, *atomizer, bailer, borer, boiler, eraser, gadder* 'instr. for splittting stones', *knocker, lighter, fertilizer, poker, silencer, shutters, scratcher, scraper, scutcher, seeker, sender, transmitter, snuffer* (for candles), *stopper, strainer, suspenders, toaster, trailer, voucher* 'document', *speller* AE 'spelling-book' | from intr. vbs are *cracker* 'biscuit', *creepers, streamer* 'flag', *tumbler* orig. 'glass without a foot' | *refresher, chaser, bracer*.

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[1] L. Sütterlin, Geschichte der Nomina Agentis im Germanischen. Straßburg 1887. — J. Güte, Die produktiven Suffixe der persönlichen Konkreta im Mittelenglischen. Straßburg diss. 1908.

4. 30. 5.   Names for immaterial agents are reminder, *eye-opener*, *poser* 'question', *thriller, shocker, settler, finisher, starter, clencher* or *clincher* 'conclusive argument', *slasher* 'severe criticism', *smacker* 'blow, kiss', *snapper* 'finishing word', *sticker* 'poser', *stinger* 'crushing argument', *stunner, thumper* 'lie', *toucher* 'very near approach', *trier* 'difficult problem', *twister* = *staggerer* 'something that confounds', *tracer* 'inquiry for a missing article'.

4. 30. 6.   Slang is rich in -er words. A few are *squealer* 'informer, complainer', *rasper* 'irritating p.', *fumbler* 'impotent man', *pot-rustler* 'camp cook' AE, / *smeller* = *snorer* 'nose', *sparkler* = *goggler* 'eye', *pickers* = *stealers* 'fingers', *creepers, kickers* 'legs', *swallower* 'throat', *ticker* 'watch', *clinkers* 'fetters', *cooler* 'prison' (U.S. thieves' slang), *snorter* 'gale', *stifler* 'gallows', *wiper* 'handkerchief', *popper* 'pistol', *bone-shaker* 'old-fashioned bicycle', *clomper* 'heavy boot' (ADD) / *smasher* 'crushing argument', *corker* 'settler, lie', *clipper* 'sth first-rate', *bouncer* 'barefaced lie'.

4. 30. 7.   There are a few names for garments, most of them with a verbal basis. They cannot, however, be interpreted as agent nouns but must be considered parallel to compounds, of the t. *whetstone* (see below). A slipper is understood as a 'slip-shoe', on the same footing as the type *sleeper*. Exs are *slipper* 1478, *wrapper* 'headdress' 1548 (other senses are newer), *drawers* 1567 (there is no reason to suppose 'low origin', (OED), the word is simply 'a drawing-garment', orig. also used for stockings); *drawers* caused *trouse* 1578 (*trews* 1568) to be refashioned into *trousers* 1599. More recent are *tucker* 1688 H 'a piece of lace worn by women round the bodice in the 17—18th c.', *weeper* 'badge of mourning' 1724, *starcher* 1818 H 'starched neckcloth', *waders* 'waterproof boots' 1841, *tier* 1846 AE 'pinafore', *sweater* 1882, *jumper* 1853, *slicker* 1884 AE 'waterproof coat' (or f. adj *slick*), *rompers* 1922 'washable overall for children'. A denominal coinage, semantically belonging here is *stomacher* 1415 'kind of waistcoat' etc. (*stomach* was formerly frequent in sense 'chest').

4. 30. 8.   The instrument by means of which something is done may come to be looked upon as the place where the action is done if the idea of place is more in evidence than the idea of instrumentality. This explains boiler, *scribbler* 'writing pad' (J. Joyce, not in OED or Spl.), *locker, container, kneeler* 'stool to kneel on', also *dresser, counter, trencher* though these originally represent F *dressoir, comptoir, trencheoir*. *Drawer* 'receptacle' 1580 H partly belongs here, but the notional basis of coining is that of agent, the word meaning 'sth which draws out things (contained in it)'. The OED lists this word as a separate sb *drawer*[2], without explaining its standpoint. As a matter of fact, the OED regards deverbal -er as a sf of agent nouns only (see OED -er suffix[1]) and cannot therefore account for deverbal derivatives in -er which are coined on a non-agential basis.

4. 30. 9.   In the majority of cases the sb is an agent noun, but themes other than agential are not excluded. Suffixal derivatives are compounds, so -er may theoretically stand for any substantival second-word. Derivatives are thus parallel to composites of the types whetstone/rattlesnake/mincemeat (2. 7), which are based on the relation of agent, purpose etc. in com-

bination with the verbal idea. The group designating garments, for instance, is parallel to the t. *whetstone*: the underlying theme is that of purpose, destination. The type *mincemeat* is matched by words such as *tucker, starcher, tier,* but the type is weak. Words not coined with the underlying theme of agent are 16th c. and later (the oldest coinage appears to be *slipper* 1478). OE deverbal derivatives with the sf are all agent nouns. To the oldest stock belong *baker* (*bæcere* f. *bacan*), *blower* (*blāwere* f. *blāwan*), *follower* (*folgere* f. *folgian*), *fowler* (*fugelere* f. *fuglian,* at the same time connected with sb *fugel*), *leaper* (*hlēapere* f. *hlēapan*), *learner* (*leornere* f. *leornian*), obs. *leaser* (*lēasere* 'liar' f. *lēasian*), *lender* (*lǣnere* f. *lǣnan*), *monger* (*mangere* f. *mangian*), *thrower* (*þrōwere* f. *þrōwian*), *whistler* (*hwistlere* f. *hwistlian*). In OE there were, beside our type, agent nouns in -*a* and -*end* which have not survived. They merged into -*er* which grew very strong in the ME period (for ME exs see Langenfelt 77ff.).

4. 30. 10.   Many words join various sense groups. I give a few exs only: *sweater* may mean 'hard worker', 'a sudorific', 'a woolen vest'; *swimmer* may denote a person, a bird, a swimming organ; *taster* may be applied to a man, an implement; it may also denote a portion of food; *trimmer* denotes a person, an implement, a beam, a run, blow etc.; *twister* is used for persons, devices, or some immaterial agent; a *wrapper* may be a person, a covering, several kinds of garments; *scorcher* may mean 'hot day, rebuke, a p. who motors furiously'.

Synchronically speaking, pairs of words of the type *peddle / peddler, pedlar* (6. 1) belong here, too.

4. 30. 11.   With denominal derivatives the original idea underlying them is 'one professionally connected with . . .', as in p o t t e r f. *pot*. The type is OE though most of the PE words are ME or later. Exs are OE *bōcere* 'scribe' (f. *bōc* 'book'), *sangere* 'singer' (f. *sang* 'song'), *sǣdere* 'seeder, sower' (f. *sǣd* 'seed') *fiscere* 'fisher(man)' (f. *fisc* and *fiscian*), *piper* (f. *pīpe* and *pīpian*), *hafocere* 'hawker' (f. *hafoc* 'hawk'). ME are *kitchener* 'one employed in the kitchen of a monastery', *birder* 'fowler', m i l l e r (vb 1552), obs. *linener* 'linen-draper', *nutter* (vb 1604). Later are *tinner* 1512, *stockinger* 'stocking-weaver' 1741, *podder* 1681 'one employed in gathering peas in the pod'. Cp. also *milliner* 1529, orig. 'native or inhabitant of Milan'.

With the meaning 'maker or seller of . . .' are coined *bottler, capper, girdler, glover, needler, potter, pepperer* 'dealer in . . .', *purser* 'maker of . . .', *roper, saddler, tiler* (all ME). After the ME period, the type has no longer been productive.

4. 30. 12.   Many words which were orig. loans of French words in -*(i)er,* -*our* have joined the native group of words denoting one holding a profession, so, for the PE speaker, they contain the same sf -*er* now. Exs are *farmer, gardener, juggler, jeweller, accuser, commander, miner* a.o.

4. 30. 13.   Substantives denoting branches of learning characterized by the termination -*graphy,* -*mancy,* formerly also -*logy* derive personal sbs in -*grapher,* -*mancer,* -*loger.* The -*er* of this type as well as the others was orig. not felt to represent the native sf but OF -*er,* cp. *horologer* 1496, for a long time spelt

horloger, repr. OF *horloger* (14th c.), *chirographer* which is first quoted in AF form *cirogrofer* (in French context), going back to LL *chiro-grapharius*; the original form of *astronomer* is *astronomyer* 1366; *astronomer* is regular from the 16th c. only.

4. 30. 14. The type h i s t o r i o g r a p h e r does not appear to be older than the end of the 15th c. The oldest exs I have found is the title word, rec. 1494. Later are *chronographer, hydrographer, chirographer, geographer, cosmographer, scenographer* (16th c.), *glossographer, mimographer, logographer, lexicographer, iambographer, hymnographer, hagiographer* (17th c.) a.o. A few have by-forms in *-ist*, as *calligraphist, chalcographist, cryptographist, demographist, ethnographist* a.o.

Exs for words in - m a n c e r are *geomancer* 1400, *chiromancer* 1566, *astromancer* 1652.

4. 30. 15. The type a s t r o l o g e r goes back to the 14th c. The title word is rec. 1374. A little later is *horologer*, in form *horloger* quoted 1496, which is, however, OF *horloger*. Later are *chronologer* 1572, *philologer* 1588, *physiologer* 1594, *mythologer, etymologer* (17th c.). *Geologer* is a modern coinage of the type (1822), but the usual word is *geologist* 1795, and *-ist* has practically superseded *-er* in this group. For *astrologer*, however, no *-ist* word exists.

The sf *-er* has also spread to a few other sbs denoting agents. There is *astronomer*, orig. in form *astronomyer* 1366, from 16th c. *astronomer*. The word *physiognomer* (1500—1706) is obsolete now, and abstract sbs in *-nomy* derive agent nouns in *-nomist*. *Scrivener* is a LME extension from *scriveyn* (= OF *escrivain*), *musicianer* is extended from *musician*; *practitioner* is a refashioned and extended form of earlier *practician*; *parishioner* is extended from earlier *parishion, parishen*. Obs. *collegianer* 1546 is app. F *colligien* + *-er*.

4. 30. 16. Except for the preceding types in *-grapher, -mancer*, *-er* has long become unproductive for the derivation of agent nouns from substantives (not from verbs). The modern type are compound sbs, as *watchmaker, hairdresser*. Cbs with *-man* as a second-word are especially productive: *cattleman, milkman, postman* etc. / *steersman, batsman* etc. (see 2. 2. 2; 2. 5. 1—3).

4. 30. 17. In a number of words most of which are now obsolete or only used with reference to history, we have the characteristic ending *-erer*. In some of them (*cellarer* 'officer in a monastery having charge of the cellar' 1300, *waferer* 'maker of wafers in royal or other great households' 1362, *ewerer* 'ewer servant at table' 1450, *larderer* 'officer in charge of the larder' 1483), the morpheme *-er* is simply attached to a nominal stem ending in [ə(r)]. In others a (usually monemic) word in *-er* is matched by a substantive in *-ery, -ry*, as *fermerer* 'superintendent of a monastic fermery (= infirmary)' 1386—1483 / *fermery* 1377, *panterer* 'officer in charge of the pantry' 1420 / *pantry*, orig. in form *pantery* or *panetry* 1300, *waferer* 1362 / *wafery* 1450, *larderer* 1483 / *lardery* 1538, *naperer* 'official in charge of the royal table linen' 1494 / *napery* 'table linen' 1380, *pasterer* 'pastry cook' 1552—1660, *fripperer* 'dealer in cast off clothing' 1584 /*frippery* 1568.

Originally, the termination *-erer* seems to have been felt characteristic of words denoting officers or superintendents in monastic, royal, or other great

households. The greater part is connected with food: *cellarer, larderer, waferer, panterer*. Several words which originally ended in *-er* only, were made to fit into the *-erer* pattern, as *panterer* (f. *panter* 1297), *ewerer* (f. *ewer* 1361, partly because *ewer* also denoted the water jug itself). *Fewter* 'keeper of grey-hounds' 1340 was refashioned into *fewterer* (prevalent since about 1550). Some words were also used for independent craftsmen or shopkeepers, as *waferer* 'wafer-seller', *fruiterer* 'fruit-seller' 1408, *pasterer* 'pastry cook', *poulterer* 1638 (f. earlier *poulter* 1400). *Caterer* 1592 belongs here semantically; perhaps also formally if we consider it to be an extension of synonymous *cater* 1400 (but it may be a regular agent noun derived from the verb *cater* 1600). The analogy of *naperer / napery* may have prompted the coinage *fripperer / frippery* (the word *fripper* 1598 has also been coined).

On the one hand, there once was a tendency to use the termination *-erer* with the particular group we have just described. The only word, however, in which *-erer* is the derivative morpheme, is *fruit-erer*. On the other hand, a derivational connection between words in *-ery* and such in *-erer* was at one time felt to exist. However, the alternation *-ery / -erer* had little chance of prevailing, as the common derivative alternation was that of *-ery / -er*, as in *bak-ery / bak-er* (see 4. 32. 7). Of the words discussed above, only *poulterer*, connected with the collective noun *poultry*, has survived. The pattern may have derived *adulterer* 1370 f. *adultery* 1366, *sorcerer* 1526 f. *sorcery* 1300, *upholsterer* 1613 f. *upholstery* 1649 (*upholstery* must then be older than the first record in OED). But it is also possible that *adulterer* and *sorcerer*, matched by the older forms *adulter* 1382 and *sorcer* 13.., were coined as the masculine counterparts of *adulteress* 1382 and *sorceress* 1384 (see 4. 35. 2).

4. 30. 18.   The sf -er has a by-form -ier, found in *bowyer* 1297, *collier* 1350, *sawyer* 1350, *glazier* 1385, *lawyer* 1377, *spurrier* 1389, *brazier* 1400, *hosier* 1440, *clothier* 1470 (orig. *clother* 1362), *grazier* 1502, *furrier* 1576. The words are all derivatives denoting craftsmen or the like. Koziol (436) explains the sf as having originated in agent nouns from vbs in *-ian, -ien*, as *louier, makier*. This is more than doubtful as neither *bowyer* nor *collier* can be deverbal derivatives; the vbs are recorded from the MoE period only. I think *-ier* is due to French words such as *corier, cotier, soldier* which, in English, gave *currier* 1380, *cottier* 1386, *soldier* 1300. *Cot* was an independent word, so F *cotier* was easily connected with it. As there were no verbs to go with the sbs, the danger of the sb being swallowed by *-er* was little. Thus *-ier* settled as a sf with personal sbs to designate one who is professionally connected with . . . In some cases, earlier *-er* was changed into *-ier*, as in *clothier, sawyer, soldier*. *Lockyer* 'locksmith' 1356 is now obsolete. The word *courtier* (orig. *courteour* 1290) had its spelling refashioned after the words of this group (the spelling *courtyer* is first recorded for 1481 in the OED), perhaps under the influence of *soldier* or *squire* (the earlier spelling was *squyer*). *Lawyer* also has earlier forms in *-eour* (*laweour*). *Lawyer* and *courtier* are, anyhow, exceptional in this group of words denoting craftsmen.

Glazier came to be derivationally connected with *glaze* vb, and the alternation *glaze/glazier* attracted *graze/grazier*, *braze/brazier* (the verb *braze* is recorded 1552; OE *brasian* apparently did not survive into ME). However, neither the

original denominal group *bow-ier* nor the deverbal group *glaz-ier* maintained productivity in the MoE period, owing to the much stronger and older patterns of derivation in *-er*. The unproductiveness of the nominal group has led to phonic and/or semantic dissociation between basis and derivatum. In part, the derivatives now stand for contents and referents no longer quite familiar in present-day life: *bowyer, spurrier, brazier, grazier*, even *glazier* which is little used in American English. The word *hosier* is not used in American English either, nor is *collier*. Alive are *lawyer, sawyer* (a man who saws in a lumber mill), *furrier*, and *clothier*, the latter now associated with *clothes* as against original derivation from *cloth*.

Interpreting *-ier* as an allomorph of *-er*, and bearing in mind that derivation with native suffixes involves no phonological changes, we have to state that the alternations observed in *coal/collier, glass/glazier, grass/grazier, hose/hosier* are not relevant to the present-day derivative system.

4. 30. 19.   The sf *-er* can be tacked on to almost any basis: a simple or composite sb or adj, a numeral, all kinds of phrases, on the general semantic basis 'he who or that which is connected with or characterized by his appurtenance to . . .'. Words coined this way chiefly denote persons, but there are also names of material, rarely immaterial things. The sf, so to speak, stands for a great variety of full second-words, as the exs show. The following is an attempt at a survey, not an exhaustive treatment. No type is older than ME.

4. 30. 20.   Type b a n q u e t e r 'person connected with . . .': *bencher* 'judge', *banqueter* 'guest at a b.', *clubber* 'member of a club', *commissioner* 'member of a c.', *conveyancer* 'lawyer specialized in conveyances', *covenanter, golfer, laker* 'one of the lake poets', *letterer, mealer* 'one who takes only meals at a boarding-house' AE, *roomer, petitioner, pleasurer* 'pleasure-seeker', *prizer* 'prizefighter' (arch.), *remembrancer* (official), *trammer* 'one who removes the trams of coal' etc., *trooper, probationer* 'p. on probation', *warder*.

4. 30. 21.   Type L o n d o n e r 'person from . . .'. Derivation is chiefly made from names of towns or cities, but also from names of countries, regions and names denoting various kinds of places. Exs are *Londoner, Dubliner, Birminghamer, New Yorker, Vermonter, Berliner, Hamburger, Danziger | Islander, Hollander, New Englander | borderer, cottager, villager, islander, highlander, lowlander, swamper* AE, *norther* AE, *backwoodser* | with derivatives from adjs used as primaries in f o r e i g n e r, *Britisher, westerner, northerner, southerner*. In regional AE are also found such words as *Dutcher, Frencher, Irisher, Welsher* (ADD).

We are reminded of the German type *Berliner* which is, however, of different origin. It goes back to cbs with *-variôs* 'people' for a second word, the latter having developed into *-er* (cp. Kluge DW 40/41 and Wi 221. A. 2).

The sf is only tacked on to names of English-speaking and Germanic countries.

4. 30. 22.   The type s t e a m e r 'steamboat' is the same as the preceding types formally. The sf stands for a sb denoting a thing. Exs are chiefly words denoting ships, as *lighter* 1487, *coaster* 1574, *cruiser* 1679, *smuggler* 1799, *sealer, slaver, steamer, trawler, spouter* 'whaling vessel', *wrecker, freighter, liner* (19th

c.), *tanker, oiler* (20th c.). From the railway sphere are *sleeper, smoker, diner*. Part of the words are derived from a verbal basis, as *cruiser, trawler, spouter, sleeper, smoker, diner, lighter* (fr. *light* 'unload a ship') formed like words of the type *slipper*.

Noser 'strong head wind' and *souther* 'south wind' are instances of a pretty weak semantic type.

4. 30. 23.   Type **fiver**. The sf is tacked on to numerals with the same basic meaning of appurtenance. A fiver is someone or something belonging to the number five. The sf is, as in the two preceding groups, short for a word. With the type word and *tenner*, the key is usually dollars or pounds, but it may also be almost anything else: one of a body of (sixteen), a youth of (sixteen), a hit of (thirteen, five) etc. Exs are *thirteener* 1762, *sixteener* 1801, *fourteener* 1829 'a line of 14 syllables', *oner* 'unique specimen' 1840, *fiver* 1853, *tenner* 1861, *sixer* 1870. The type is more recent and weaker than the corresponding German type (*Dreier, Vierer, Sechser, Zehner* etc., s. KlEW s.v. *Dreier*; G coinages are as old as MHG).

4. 30. 24.   The sf is frequently tacked on to compounds and syntactic phrases. The chief types are **weekender / old-timer / four-wheeler**. Exs are (many of them AE) *night-lifer, carpetbagger, sandbagger, honeymooner, pigtailer, bobby-soxser, teen-ager, party-liner, bottlenecker, Scotland-Yarder / midnighter, middle-ager, backbencher, back-hander* 'blow', *left-winger, left-hander, underworlder, inner-circler, low-incomer, first-nighter, first-termer. fourth-grader / two-seater* 'car', *six-pounder, ten-pounder* (cannons), *two-decker, three-decker* (ships), *eight-incher* 'eight inch point collar'.

Derivatives from various other syntactic phrases are *stand-patter* AE (f. political slang term *stand pat*), *go-getter, stump-jumper* AE 'countryman', *do-gooder* AE, *rank-and-filer*, etc. In the New Republic (1948, Feb. 2, p. 8) I read *Hoover, the No. 1 Germany-firster*.

Slang is rich in -er words. A few exs are *facer* 'blow in the face' etc. *goner* 'undone, ruined', *deader* 'dead man', *lifer* 'prisoner for life', *lunger* 'consumptive', *greener* 'newcomer' AE, *gooder* 'a good one, a good thing', *upper-and-downer* 'wrestling match', *up-hander* 'soldier surrendering' a.o.

Note: The idea 'belonging to' has also helped to form *widower*. A widower is a man who, typically speaking, belongs to a widow. But it may also be that -er is simply a masculine ending.

4. 30. 25.   In many cases, -er has spelling variants in *-ar, -or*, which originally are not related to our suffix. Phonetic identity and the sameness of function established the connection. That the different spellings are really felt to be the same suffix, is also obvious from the fact that verbs are backderived from suffixed nouns in the same way. Spelling variants in *-ar* are chiefly Latinizing 16th and 17th c. refashioned older forms in *-er, -or*. Examples are *beggar* 1225 (various spellings, *-ar* since the 17th c.), *liar* 1290 (*-ar* 17th c.), *pedlar* 14th c. (*-ar* 16th c., note the Am. spelling *peddler*), *burglar* 1516, *bursar* 1567. Compare with the foregoing words *burse, beg, lie, peddle, burgle* AE. On the other hand, northern British dialects have often *-ar* where StE has *-er*, as in *forbear* 'predecessor'; see OED *-ar*[3]. Variants in *-or* are *sailor* 1642, orig. *sailer* LME,

vendor 1594 (AE also *vender*), *editor* (cp. *to edit*), *conqueror* (cp. *conquer*), *visitor* (formerly -*er*, cp. *visit*), *operator* (cp. *operate*), *survivor* (coined as a legal term 1503; in law terms the spelling -*or* with pronunciation [ɔ(r)] is usual), *director* (cp. *direct*) and many others.

4. 30. 26. Original loans from French (ending in -*ier*, -*our*, -*oir*) which had a verb or a suffixless noun to go with, naturally came to be felt as derivatives. Examples are: *farmer, jeweller, gardener* / *miner, commander* / *dresser, counter*. On the other hand, classical influence produced a certain counter-action in the 16th and 17th c. insofar as -*er* words received a Latinizing spelling in -*ar* or -*or* (see the examples above). There are thus two opposite currents: one is to assimilate foreign elements to the native -*er*, and the other to introduce a learned or pseudo-learned element. The latter is responsible for the frequent AE pronunciation [ɔ(r)] in *creator, actor* a.o.

Latin-coined words in -*ator* also contain the sf -*er* for the present-day linguistic feeling. Their stress is dictated by that of the underlying verb in -*ate: génerate/génerator, originate/originator*. Between 1550 and 1750 the stress was often on the penult, after the Latin accentuation (see B. Danielsson 137—142).

4. 31.   -erel, -rel /ərəl, rəl/

is of somewhat doubtful origin. Apparently it originated in loans from French such as *mackerel* 1300 (fish) and *kestrel* 'small hawk' 14.. (if it represents OF *cresserelle*) from which -*erel*, -*rel* split off though the words were not analysable as root and sf (cf. for a similar origin words in -*cade* and -*athon*, also -*teria*). The earliest rec. word is *pickerel* (spelled *pykerell*) 'young pike' 1338 which thus joined *mackerel*. Other names of animals the sf has formed are *cockerel* 'young cock' 1440, *mongrel* 1486 (f. root *meng, mong* 'mix', the earliest form is *mengrel*), *hoggerel, hogrel* 1530 'young sheep of the second year' (f. *hog* 'sheep of a certain age').

There are also a few disparaging words denoting persons, as dial. *gangrel* 'vagabond' 1530 (f. sb *gang*), obs. *bedrel* 'bedridden p.' 1513 (f. *bed*, perh. as opp. to *gang*), obs. *dummerel* 1592 'dumb p., dummy', *fondrel* 'simpleton' f. *fond*, deverbal *dotterel* 1440 'dotard'. *Scoundrel* 1589 has the derogatory character of the group, but its etymology is unknown. Of unknown etymology are also a few Scottish words, as obs. *ketterel* 'vile wretch' 1572—1585, *gamphrel* 1728 = *gomerel* 1814 'fool, simpleton', *haverel* 1774 'one who talks nonsense'. For other obs. examples see Rotzoll 37—40.

Wastrel as applied to persons is quite modern (first rec. 1847), the original meaning is 'tract of waste land' 1589.

In StE the sf has been unproductive since about 1600.

4. 32. 1.   -ery, -ry /əri, ri/

originated with French words in -*erie* (G -*erei* has a similar origin). It forms concrete and abstract sbs from substantives. The principal semantic groups are today: 1) a collectivity of persons (type *yeomanry*), 2) things taken collectively (type *jewelry*), 3) acting, behavior (esp. undesirably) characteristic of . . . (type *treachery*), 4) place which is connected with . . . (types *tannery* /

swannery). With the exception of *swannery*, all the types are French. Examples of loans are *ancestry* 1330 (1), *robbery* 1200 (3), *treachery* 1225 (3), *jugglery* 1300 (3), *ribaldry* 13.. (3), *sophistry* 1340 (3), *avowry* 1330 'function of an avowe ('patron'), *tenantry* 1384 (3, 4). For *nunnery* 1275 no French pattern appears to be recorded, OF *juelerie* is not quoted before 1434 in Godefroy whereas E *jewelry* occurs at the beginning of the 14th c. The absence of French counterparts is no strict proof of their non-existence, but it may also be that the English words are independent coinages. The word *husbandry* is first recorded 1290 which shows that the sf was by that time an established formative (Gadde op. cit. footnote 71, p. 22 assumes AF origin). On the other hand, French words continued to be borrowed, which often makes it impossible to decide whether a word is an English derivative or a loan from French. Gadde (28—31) considers several early words (as *buggery* and *harlotry*) to be loans.

4. 32. 2.   F *-erie* is the result of a secretional process: *-ie* (f. L *-ia* f. G *-ia*) when tacked on to agent nouns in *-ier* became *-erie* (as in *chevalerie, sellerie, archerie* etc.). From French loans the English sf sprang in the following way: on the one hand, English borrowed word pairs such as *robber/robbery, juggler/ jugglery, carpenter/carpentry, treacher/treachery* where, historically speaking, the sf is merely *-y*. In French, as early as the 12th c. (see Ny 393), the sf was apprehended as *-erie* which explains the borrowed English pairs *sophist/ sophistry, mason/masonry, ribald/ribaldry, jew/jewry, spice/spicery*. Derivation in English has accordingly been made either after the pattern *carpenter/ carpentry* (i.e. *-ery* understood as matching agential *-er*), or *spice/spicery* (i.e. *-ery* directly tacked to a root). In the neutral sense 'state, condition, practice of ...' we have it in the loans *mastery* 1225, in *aldermanry* (in the ML form *aldermaneria* once rec. 1229, in its English form not before 1502, acc. to OED), *jugglery* 1300, *masonry* (second half of the 14th c.), *archery* 1400, *cutlery* 1449. The first Ec of the group is *husbandry* 'business of a husbandman' 1290. In this group, the use of the sf was favored by Anglo-French *-erie* and Anglo-Latin *-aria, -eria* in law terms such as *aldermaneria, utlagerie/utlagaria* 'outlawry' after which *husbandry* seems to have been coined. *Nursery* 1387 'upbringing, nursing' is perh. refashioned obs. *nouricery* 1330 (for both no pattern is recorded). *Husbandry* attracted *housewifery* 1440. Later are *tannery* 14.., *barbery* 1540, *saddlery* 1449, *smithery* 1625, *joinery* 1678, *turnery* 1644 'craft, art of ...', *rivalry* 1598 'competition', *merchantry* 1789 'business of a. m.'. But from the 14th c. on, the most frequent coinages are words with a depreciative tinge: *buggery* 'heresy, sodomy' 1330 (obviously an Ec), obs. *japery* 'ribaldry, trickery' 1340, *harlotry* 1325, *devilry* 1375, *bawdry* 1854 'business of a bawd, procurer', *beggary* (14th c.), *papistry, heathenry, popery, slavery, knavery, thievery, roguery, savagery, foolery, waggery, drudgery, witchery, wizardry*, obs. *bitchery* 'harlotry' (16th c.), *doggery, bigotry, pedantry, buffoonery, whiggery* (17th c.), *quackery, casuistry* (18th c.), *trickery, jesuitry, snobbery* (19th c.), *banditry* 1922. Other words can be derived freely, as *cuckoldry, charlatanry, tomfoolery, puffery* 'puffing publicity' etc. *Knight-errantry* 1654 may, but need not be, depreciative.

Derivatives from professional sbs in *-ist* are devoid of the disparaging tinge, as *palmistry* ME, *chemistry* 1600, *dentistry* 17.., *artistry* 1868, *punditry* 1926.

4. 32. 3.   The collective sense of personal sbs sprang from loans such as *ancestry* 1330, *jewry* 1330 H. After the pattern have been coined *yeomanry* 1375, *Irishry* 1375 'the native Irish', as opposed to 'English settlers in Ireland' which were called the *Englishry* (1470), *Danishry* 1470, *Welshry* 1603, *archery* 1465 H, *peasantry* 1553, *soldiery* 1570, *tenantry* 1628, *husbandry* (obs. in this sense) 1675, *masonry* 1686, *citizenry* 1819, *merchantry* 1862 H, *press-agentry*.

4. 32. 4.   The type j e w e l r y is the counterpart of the preceding group type *yeomanry*. A loan from OF is *spicery* 1297 (OF *espicerye*) 'spices collectively'. A little later is *jewelry* 13.. (the French word *juelerie* is first rec. 1434). These words are doubly connected, with *spice*, *jewel* and (obs.) *spicer*, *jeweller*, so *spicery*, *jewelry* may be understood as 'spices, jewels collectively' or 'ware of the spicer, jeweller'. Such words have also been formed where only the second analysis is possible (as *carpentry*; *carpenter* is not further analysable in English) or the first one (as *finery*; there is no agent sb **finer*). The meaning of words of this group is thus 'concrete things connected with what is denoted by the agent sb or the ultimate root'. Exs are *husbandry* 1386 'household goods', after it *housewifery* (sense obs.) 1552, *carpentry* 1555 H, *farmery* 1656 'buildings, yards etc.' (BE only). Chiefly from about 1600 on we find words with the meaning 'ware', as *coopery* 1558, *chandlery* 1601, *cutlery* 1624 H, *stitchery* 1607, *crockery* 1719, *stationery* 1717, *ironmongery* 1711, *confectionery* 1769, *pottery* 1785 H, *toggery* 1812 'clothes' (f. *tog*, sl), *vinery* 1883, *lacery* 1893. Cp. also *legendry* 1849 'legends collectively'. Other collective nouns derived from sbs denoting things are *pageantry* 1608 'pageants (i.e. scenes) collectively', *machinery* 1687, *scenery* 1748, *bookery* 1822, *blazonry* 1622. Not derived from sbs are *ancientries* 1866 'antiquities' (perh. after *antiquities*), *finery* 1680, in sense after bravery 'finery' 1563 (app. f. vb *brave* 'swagger, dress finely'), *greenery* 1797.

4. 32. 5.   Old and very strong today, esp. in AE, is the type t a n n e r y 'place where a tanner works; place where tanning is done'. Words of this group are doubly connected, with the basic sb resp. verb as well as with the agent noun. Exs are *nunnery* 1275, *spicery* 1297 (= OF *espicerie*), *vintry* 1397 (f. obs. *vinter* 'vintner'), *nursery* 1499 H, *ropery* 1363, *skinnery* 1480, *tracery* 1464 'place for tracing, drawing' (obs.), *wafery* 1455 'place where wafers are baked', *pottery* 1483 (perh. orig. = F *poterie*), *chandlery* 1601, *boilery* 1628, *brewery* 1658, *soapery* 1674, *fishery* 1677, *printery* 1638, *tannery* 1736 H, *tinneries* 1769, *smithery* 1755 H, *grocery* 1791, *nailery* 1798. 19th c. are *bindery*, *bakery*, *grindery*, *hatchery*, *tilery*, *winery*, *rettery*, *smeltery*, *growlery*, *snuggery*. Mencken AL, Spl. I. 348—350 quotes *cannery*, *creamery*, *groggery* and from the 20th c. *cobblery*, *renewry*, *shoe-fixery*, *lunchery* etc. Most are nonce-words.

4. 32. 6.   Type s w a n n e r y 'place where swans are kept'. Exs are *heronry* 1603, *swannery* 1754, *swinery* 1778, *goosery*, *hennery*, *hoggery*, *owlery*, *pidgeonry*, *minkery*, *piggery*, *rookery*, *apery* (19th c.), *cattery*, *rabbitry* a.o. (20th c., q. Mencken op. cit.).

Parallel is the type g r a p e r y 'place where grapes are cultivated'. Exs are *pinery* 1758, *shrubbery* 1748, *rosery* 1864.

Derivatives were originally made from sbs. But as derivatives from agent nouns were naturally ambivalent, they came to be analysed as connected with

the ultimate root if the word existed. On the other hand, as the ultimate root could in many cases be interpreted both as vb and as sb, deverbal as well as denominal derivation has become established. *Robbery, printery, bindery, brewery, smeltery* a.o. are intimately connected with the underlying verbs, and part of them were prob. coined as deverbal derivatives. The majority of coinings have, however, remained within the original denominal boundaries, and recent American words such as *cakery, sweetery, beanery* can only be analysed as denominal derivatives.

4. 32. 7.   Formally, we have four derivative patterns: *carpentry* fr. *carpenter* (i.e. derivatives from unanalysable agent substantives); *printery* fr. *printer* and *print; popery* fr. *pope;* and *greenery* fr. *green.*

4. 32. 8.   As for the distribution of the allomorphs *-ry* and *-ery*, it appears to be dictated by a tendency to derive proparoxytonic words. We observe that, in accordance with this tendency, paroxytonic words add *-ry* as in *jewelry* fr. *jewel: agentry, banditry, cuckoldry, heathenry, housewifery, husbandry, harlotry, ribaldry.* When the basis ends in *-er*, its final *r* is dropped, as in printery fr. printer: *archery, saddlery, jugglery, smeltery.* Monosyllables add *-ery: finery, greenery, pinery, scenery, thievery; machinery* joins the group on account of its oxytonic stress. When the basis is already proparoxytonic, only *-ry* is added (the final *r* of a basis is dropped): *casuistry, charlatanry, citizenry, jesuitry; chancellery, confectionery, stationery* (but words in [tə(r)] derive trisyllables in *-try: ancestry, carpentry*).

The only exception to the stressing tendencies which have just been stated is *jewry*. Other words which do not conform are derivatively unconnected. *Avowry* is an archaic word whose basis *avow* sb is not current now, nor will most present-day speakers connect *bawdry* with *bawd*. Monemes (unanalysable units) are also *dowry, foundry, laundry, pantry, vestry, vintry*. The stressing tendency does not seem to be older than the 18th century. Till then, forms like *bawdery, Englishery, jewellery* (with four syllables) were also in use.

Deviltry 1825 has its *t* from such words as *harlotry* and *jesuitry*.

4. 32. 9.   Except with the t. *printery/printer, -y* has not become productive as an independent sf, though there are a few deverbal coinages. It was perh. after the pattern of such pairs as *flattery* 1320/*flatter* 1340, *embroidery* 1393/ *embroider* 14.. that *enquery* 1440 was derived from *enquere* (the final *-e* was no longer pronounced). It was subsquently latinizingly refashioned into *inquiry* (alongside of *inquire*, after L *inquirere*) and attracted the rime word *expiry* 1752 (f. *expire*). *Treaty/treat* attracted *entreaty* 1523 (f. *entreat*).

Structurally speaking we have the alternation zero/*-y* also in loans from Greek, such as *dynasty/dynast, monarchy/monarch*, and in loans from French such as *barony/baron, felony/felon, villainy/villain, honesty/honest, jealousy/ jealous*, but in neither case have English coinages developed.

4. 33.   **-ése** /iz/

As to the origin of the sf, the OED says that it is 'ad. OF *-eis* (mod. *-ois, -ais*)'. I very much doubt the correctness of this etymology. OF *-eis* had developed into *-ois* before the English words in *-ese* came into existence.

Final -*s* had long been dropped. E -*ese* is due to It -*ese* (f. L -*ensem*), denoting one belonging to a place. English borrowed *Milanese* 1484, *Genoese* 1553, *Chinese* 1577, *Portuguese* 1586 (or f. Port. *Portuguez*, as the OED supposes), *Maltese* 1615, *Genevese* 1650, *Tyrolese* 1809, *Viennese* 1839. On the other hand, such loans as *Japanese* 1604, *Chinese* 1644, *Javanese* 1704 paved the way for derivatives from other remote foreign countries, chiefly such of the Far East, as *Annamese*, *Burmese*, *Ceylonese* (the original form was *Cingalese* 1613, acc. to OED, repr. native *sinhalās* which would suggest that -*ese* in this group is partly of native origin), *Faroese*, *Nepalese*, *Pekinese*, *Sudanese*, *Senegalese*, *Singalese*, *Vietnamese*. All these words denote the inhabitant as well as the language of the respective foreign countries, and the tinge of strangeness and striking originality which these words evoke, helped to coin words denoting a strangely peculiar style, a negatively characteristic jargon. The earliest recorded word is J o h n s o n e s e 1843, followed by *Carlylese* 1858, *journalese* 1882 and recent coinages such as *novelese*, *telegraphese*, *jargonese*, *cablese*, *officialese*, *New Yorkese*, *Americanese*.

The depreciative tinge originating in the group of the type *Japanese* recalls the antiquated German words *Japanese* and *Albanese*, conveying a disparaging tinge now, while *Chinese* has not been affected. The first two words have been replaced in serious use by *Japaner*, *Albaner*.

4. 34.   -ésque /ɛsk/

forms adjs with the meaning 'having the (artistic, bizarre, picturesque) style of . . .'. It developed out of French loans such as *grotesque* 1561, *arabesque* 1656, *moresque* 1611 'moorish in style or ornament', *romanesque* 1715. The word *picturesque* 1703, a refashioning of F *pittoresque*, characterizes the whole semantic field of the sf. Exs of English coinages are D a n t e s q u e, *Rembrandtesque*, *Turneresque*, *blottesque* (19th c.), *carnivalesque* is somewhat older (1791). In recent usage the type is quite frequent: we find *lawyeresque*, *teacheresque* (both T. S. Stribling, Unfinished Cathedral); esp. with derivatives from proper names, as *Garboesque*, *Hemingwayesque*, *Kiplingesque*. They are said by Zandvoort (English Studies 26. 149) to be complimentary, but the implication proper is that given above.

A few other 19th c. words, all used with reference to art, are *gardenesque*, *barbaresque*, *japanesque*, *junoesque*, *statuesque*. The sf has similar connotations in recent French, cf. J. Giraud, Quelques néologismes dans la langue du cinéma. Le Français Moderne 25. 212—216, 1957; J. Marouzeau, Note sur la valeur du suffixe -*esque*. Le Français Moderne 26. 1—2, 1958.

4. 35. 1.   -ess /ɪs, əs/

forms feminine sbs parallel to masculine personal sbs. Its ultimate source is Gr -*issa* which in ecclesiastical words such as *diaconissa* (f. *diacon*) passed into ecclesiastical Latin. Many other words were coined in Latin and the Romance languages. From Old French, English borrowed a great many words, such as *adulteress*, *countess*, *princess*, *patroness*, *hostess*, *traitress*, *tormentress*, to cite only a few analysable words. As early as the 14th c. -*ess* was an established formative, not only with words of Romance origin, but it was also appendable

to native words. ME coinages are *friendess, dwelleress, neighboress* (no longer used), *wolfess, herdess, shepherdess, huntress, teacheress | jewess, authoress.* Later are *archeress, canoness, ambassadress, ancestress, laundress, murdress, poetess, popess* (*papess* 1620 is F *papesse*), *temptress, tyranness, votaress = votress, vowess* 'nun' (16th c.), *dragoness, farmeress, heiress, jesuitess, jointress* 'widow who holds a jointure' = *jointuress, ministress* 'woman who ministers', *mooress, peeress, priestess, spinstress,* orig. 'female spinster = spinner', *stewardess, sultaness, tailoress, tigress* (perh. F. *tigresse*), *tutoress, vicaress,* orig. 'sister ranking immediately below the abbess', later 'wife of a vicar' (17th c.), *dictatress, editress, legislatress, presidentess, procuress, manageress, citizeness, inquisitress* (18th c.), *millionairess, seductress, squiress, visitress, waitress, wardress* (19th c.).

4.35.2.   Formally there are several derivational patterns: 1) t. p a t r o n e s s f. p a t r o n. The sf is simply tacked on to the masculine counterpart. This is the original pattern. It is followed by all words except those which have a masculine counterpart in *-tor, -ter, -der, -ster, -erer.* Exs are *authoress, tailoress, heiress, herdess* etc. 2) t. d i c t a t r e s s f. d i c t a t o r. The elision of the *r* is not original. *Enchanteress* 1374 (= OF *enchanteresse*) was for centuries the only form, *porteress* 1407, *hunteress* 1386 show the now usual elided forms from about 1500 only. The present-day pattern becomes established in the 16th c., very probably under the influence of Latin (and French). These feminine sbs were directly connected with L *-trix* and F *-trice* (note that there was only a small difference in pronunciation between F *-trice* and E *-tress*). Masculine sbs ending in *-ster* and *-der* are treated in the same way as those in *-tor, -ter.* Exs are *editress, ministress, inquisitress | ambassadress, laundress, wardress, commandress | seamstress, songstress.* 3) t. m u r d e r e s s f. m u r d e r e r. It is perh. owing to euphonic reasons that the clumsy pattern *-ereress* was reduced to *-eress.* The earliest recorded word is *conqueress* 1400, followed by *cateress* 1634, *fruiteress* 1713, *adventuress* 1754. *Adulteress* (in this form since 17th c., in F form *avoutresse* 1370) is now felt to be connected with *adulterer, sorceress* with *sorcerer* although *sorceress* 1384 are orig. regularly derived f. the now obs. *sorcer* 'sorcerer' 14th c. (*sorcerer* is first rec. 1526) and *adulter* 1384 respectively. 4) t. p r o c u r e s s f. p r o c u r e r. The type is weak. On the analogy of such words as *conqueress* 1400, *governess* 1483 (replacing *governeress* 1366 which repr. OF *gouverneresse*), which can be analysed as derived from the respective verbs *conquer* and *govern,* a few deverbal sbs have been coined, as *vowess* 1506, *procuress* 1712, *entertainess, instructess, confectioness* (17th c.). In the 17th c., *murderess* and *cateress* were perh. also felt as deverbal derivatives.

4.35.3.   In most cases, the *-ess* words denote female agents. Sometimes the wife of the male agent is denoted by the *-ess* word, as in *farmeress, presidentess, sultaness.* In general, however, not many of the *-ess* words are currently used. A teacher, poet, singer may be of either sex, and when a distinction is considered necessary, *woman* or *lady* are employed as first-words (*woman writer, lady doctor* etc.). Cf. also recent *-ette* in American English. Common are *countess, stewardess, waitress, wardress, actress, hostess, heiress, millionairess* and perh. a few others[1].

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[1] Mamie J. Meredith ASp 27 (1952) 224—225; MeAL, Spl. I, 589—591. M. has nearly 100 exs.

4. 35. 4. The loans *lioness* and *tigress* have not attracted any other coinages. This is partly due to the general absence of the category 'gender' with nouns in English, which characterizes all stages of the language: OE *-en* was weak, *he-*, *she-* have gained restricted currency only, *-ster* was prob. never a feminine sf proper, *-ette* is quite recent and not strong, the range of *-ess* has just been discussed. There has never been any strong formative comparable to G *-in* which is used for persons as well as animals. If the distinction of gender is unnecessary for persons, it is still more so with animals. The use of the sf *-ess* was certainly not 'what one might have thought its most natural purpose' (H. Bradley, The Making of English, p. 58). For most animals with which the farmer, hunter etc. are familiar there have always been individual words. The male and the female of a species are not seen as relational things, not as pairs, so *bull, boar, ram, dog, buck, stag, cock, stallion* are, linguistically speaking, not counterparts of *cow, sow, ewe, bitch, doe, hind, hen, mare* but are coined as denoting individuals with distinct functions. An additional reason is perh. that *-ess* had a literary character which made it unfit to be used with words denoting animals. In the ME period, there was only *lioness* (1300), while *tigress* is much later (1611). *She-* had become established as early as the 14th c. As it was a native and therefore a popular formative from the outset, there was little chance of its being ousted by any such learned, foreign formative as the sf *-ess*.

4. 36. 1. **-et** /ət, ɪt/[1]

has two sources. The one is F *-et*, in some cases *-ette*. OED, Rotzoll, Koziol and Jespersen, in the treatment of sf *-et*, speak of F *-et*, *-ette* only as the origin of the English sf. But there is also the *-et* we find in *thicket* (= OE *þiccet*) f. *thick*, OE *rȳmet* 'space' (f. *rūm* 'room, space'), OE *emnet* 'plain' (f. *emn* = *efen* 'even'), prob. also *hornet* (= OE *hyrnet, hyrnetu*) f. *horn*, after which the word has been refashioned, *grovet* 'little grove', *hoppet* 'enclosure' f. OE *hop* 'enclosed land'.

4. 36. 2. From French, the language borrowed words such as *banneret, billet, flasket, floweret, riveret, tablet*, analysable as suffix formations from simple words. Others such as *bullet, plummet, turret, pocket, sonnet* had no simple counterparts, so the explanation of the OED (s.v. *-et*) about the 'original diminutive sense' of these words is misleading. *Floweret* is refashioned after *flower* (the original is OF *florete*), *flasket* after *flask* (the original is OF *flasquet*). French *-et* (the French sf is hardly productive any longer, despite isolated *wagonnet* 1872) had partly diminutive, partly merely individualizing force. In English, the sf *-et* has not become very productive (see Rotzoll 118—130); moreover, it is in most cases "a formative with diminutive sense" (Jesp. VI. 24. 61).

Diminutive exs are c h a i n e t (once in 1623), *brooket* (1538—1610), *hogget, hoggit* 1538 'a yearling sheep', *porket* 1554 (now dial.), obs. *feveret* 1712 'slight fever', *rillet* 1538 'small rill or rivulet', prob. apprehended as containing *-let*

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[1] E. Rotzoll, Die Deminutivbildungen im Neuenglischen. Heidelberg 1910 (= Anglistische Forschungen 31), 131—165.

and coined after *riveret*, like *brooket* and *freshet* 1596 'stream of fresh water; overflowing of a stream' (but note that there is no diminutive nuance in *freshet*), *locket* 'little case' 1679 (f. *lock*, not 'ad. OF. *loquet*', OED), *squiret* 1838, *midget* 1865 (f. *midge* 1796 H in same sense, i.e. the sf is intensifying). Such words as *owlet*, *smilet* (Sh), *pearlet* contain *-let* for the speech feeling. *Buzzardet* 1784 'hawk-like buzzard', with the sf denoting approximation, may belong here. In *spinneret* 1826 'silk-producing organ of insects' and *swimmeret* 1840 'swimming-foot of a crustacean' the sf is individualizing rather than diminutive. *Cellaret* 1806 is an *-et* formation for the eye only, as the pronunciation [sɛlə'rɛt] shows. The spelling is prob. after *cabinet*, otherwise the word is connected with sf *-ette*.

4. 36. 3.   A particular case are *sippet* 1530 'small piece of bread served in soup or broth' etc. and *smicket* 1685 (now dial.) 'small smock'. They are derived from *sop* resp. *smock*, i.e. the idea of smallness is expressed doubly, by the symbolic vowel *i* and the sf.

4. 36. 4.   The line of native *-et* is continued by tacket 1316 (now dial.) 'nail', fr. *tack* 13.., *tippet* 1300 'narrow slip of cloth forming part of the hood or headdress', fr. *tip* or *top* (the sf caused mutation, as the exs above show; the OED terms the word 'of uncertain origin'), but in later words the sf may represent native as well as French *-et*: *tucket* 1593 'flourish on a trumpet' fr. *tuck*, *carcanet* 1530 'collar' fr. *carcan* in same sense, *lappet* 1573 'part of a garment' fr. *lap* in same sense, *ledget* 1805 'projecting piece' fr. *ledge* 'transverse bar' etc. After the loan *drugget* 1580 (= F *droquet*) 'a woollen stuff' etc. were formed *drabbet* 1851 'drab twilled linen' fr. *drab* 'kind of cloth', *lacet* 1862 'kind of lace' fr. *lace*, *bobbinet* 1832; the loan *doublet* 1326 attracted *singlet* 1746 'unlined woollen garment'. *Snippet* 1664 'small piece cut off' is prob. fr. *snip* sb 1558 in same sense (not fr. *snip* vb, as the OED has it; *-et* has not formed deverbal derivatives).

4. 36. 5.   The following words are prob. loans from French: *target* 1400 (F *targuette*; as a derivative from *targe*, pron. [ta(r)dž] it would be pronounced with a [dž], not with a [g]), obs. *cushionet* 1542, *lionet* 1586, *packet* 1530, *planchet* 1611 though they may, of course, be English derivatives, too.
   There are many words of uncertain etymology, as *basket*, *casket*, *hoppet* 'basket' (*bucket* appears to repr. OF *buket* in same sense), *gadget*, *skillet* 'cooking utensil', *mugget* 'intestines of a sheep', *strumpet*, *trinket*, *whippet* a.o.

4. 37. 1.   -étte /ɛt/

represents the French diminutive sf *-ette*, as in the loan *mountainette* 1586 (= F *montagnette*), orig. in the form *mountainet*, E *-et* representing both *-ette* and *-et* (see sf *-et*). The spelling *-ette* is 19th c. This applies to other loans also, as *collarette* (in this form 1869, earlier in French form *colleret* 1690), *bannerette* (1884, orig. *banneret* 1300, the OF form *-ette* being rendered by *-et*), *chemisette* 1807. The sf became productive in the 19th c. with words such as *novelette*, *leaderette* 'short editorial paragraph', *sermonette* (common in USA), *balconette*, *stationette*.

4. 37. 2.   Recent AE are *kitchenette, dinette* 'small dining-room' (clipped form of *dining-room* plus sf), *roomette* (on trains), *slumberette* (the equivalent on planes of a roomette, thus formally a clipping of **slumber (room-)ette*). *Luncheonette* is first recorded in the sense of 'light luncheon', but is now common only with the meaning 'place were one has lunch, chiefly at the counter'. Perhaps this meaning arose from the use of *Luncheonette* as the proper name of some place were light luncheons were offered, subsequently becoming a common sb. Other words of the type have not, however, been formed, with the exception perhaps of the somewhat irregularly formed *laundrette*, used in some cities for *laundromat* 'laundering place'.

Many other coinages are more or less nonce-words, such as *articlette, storyette, essayette, dinnerette* (see MeAL⁴ Spl. I. 362) while the language of trade has created such words as *blousette, lobsterettes, sardinettes, autoette, pursette, partitionette. Wagonette* 1858 was coined with a view to the bigger size of a wagon, but is otherwise not analysable as its diminutive.

4. 37. 3.   From the beginning of this century, *-ette* has become a tentative sf to denote female sex with personal sbs. The starting-point appears to be *suffragette* 1906 (after *suffragist* plus *-ette*). Recent is *undergraduette* 1920. Numerous new formations of this type are found in American English (see ME AL⁴, Spl. I. 362 and J. Meredith in ASp 27. 74—76, 1952). An American word of the First World War was *yeomanette* 'woman doing clerical work for the Navy'. Many others have been tentatively coined, as *censorette, conductorette, chaufferette, farmerette, officerette, sailorette, tractorette.* While not all these have gained currency, a few are common now, as *majorette* (designating a girl in uniform marching at the head of the band), *rockette* 'chorus girl', *usherette* 'a female usher'.

4. 37. 4.   We have the sf with words denoting cloth. The present-day implication is 'imitation resembling . . .'; in words of which the root is not a cloth name the connotation is likewise that of 'imitation material, inferior stuff'. This is, however, a modern sense development, the diminutive nuance having led to that of 'approximation' (as in *buzzardet*, see *-et*). The earliest words do not even contain a diminutive sense but show the sf in an individualizing function. The oldest cloth name of the kind I have found is *camlet* 1400, early associated with *camel*. Later are obs. *burdet* 1710 'some kind of cotton' app. from *burd (Alexander)*, a variant of *bord Alexander* 1392 'kind of striped silk', *persianet*, occurring in a quotation from the 'Female Tatler' 9/I (1709), *satinet, -ette* 1703, (see OED s.v. *satinette), toilinet, -ette* 1799 (fancifully derived fr. F *toile), muslinette* 1787, flannelette 1882, *leatherette* 1880, *cashmerette* 1886. In the same category belong *brusselette, georgette, cassinette, dandizette* (after F *grisette* 'female dandy') of which the bases are not cloth names.

Though French also has cloth names in *-ette*, English *-ette* is an independent development. F *satinette*, for instance, is recorded from the end of the 19th c. only (see Bloch s.v. *satin*).

The spelling *-ette* is chiefly 19th c. For *muslinette* it is recorded as early as 1787, but *-et* occurs in the 19th c. still.

The sf has the main stress which definitely distinguishes it from *-et* of which it was originally a variant only.

4. 38.   -fòld /fold/

is an adjectival (adverbial) sf with the same stem we have in the verb *fold*. It has cognates in other Germanic languages and is probably also related to OGr *haplóos, haplôus* = L *simplex*. The sf is tacked on to cardinal numerals and to adjs meaning 'many'. The original sense is 'folded in two, three etc.' (cp. *a threefold rope*), but the chief function of *-fold* is to form multiplicatives with the meaning '. . . times, . . . times as much or many'. Exs are t w o f o l d, *threefold, fourfold* etc. / *manifold, severalfold*.

The lower numerals are now strongly rivalled by *double, triple* etc. Cbs with higher numerals occur chiefly in such phrases as *he has repaid me tenfold* (with *tenfold* used as tertiary) and *that is a thousandfold worse* (with *thousandfold* used as primary), see OED s.v. *-fold*.

4. 39. 1.   -ful /fəl/ (type c a r e f u l)

is originally identical with the adj *full*. It is tacked on to substantival and verbal stems, conveying the general meaning 'full of . . .'. In OE we find desubstantival derivatives only, as *awful, baleful, careful, rightful, shameful, sorrowful, sinful, wonderful*. ME are *cheerful, doubtful, faithful, fearful, fruitful, graceful, harmful, healthful, joyful, lawful, lifeful, manful, masterful, merciful, mindful, mirthful, needful, peaceful, powerful, restful, skillful, thoughtful, wilful, worshipful, wrathful*. Later are *spiteful* 1440, *pitiful* 1449, *useful* 1483, *wishful* 1523, *beautiful* 1526, *watchful* 1548, *delightful* 1530, *dutiful* 1552, *hopeful* 1568, *hurtful* 1526, *gainful* 1555, *trustful* 1580, *spleenful, successful* 1588, *tearful* 1586, *faultful* 1591, *senseful* 1591, *truthful* 1596, *toilful* 1596, *remorseful* 1591, *respectful* 1598, *eventful, tasteful, hasteful, artful, wistful, resentful* (17th c., chiefly the first two decades). There appear to be very few words coined after the 17th c. (with the seeming exception of negative words from the next group, which are, however, prefix formations of *un-* adjs), as *taleful* (Thomson only), *speechful* 1842, *soulful* 1863, *tactful* 1864. Derivation from words of French origin was common by 1300. We find *joyful* 1290, *fruitful* 1300, *merciful* 1300, *peaceful* 1300, *pitiful(ly)* 1303, *guileful* 13.., *masterful* 13.., *doubtful* 1388, *cheerful* 1400, *graceful* 1420, *powerful* 1400—1450.

4. 39. 2.   The following is a list of adjs prefixed by *un-*. Some are recorded earlier than their positive counterparts, as *unbeautiful* 1495 (b. 1526), *unhopeful* 1450 (h. 1568). The earliest coinages I have found are *unmindful* 1382, *unfruitful* 1388. Later are *unartful, unboastful, uncareful, uncheerful, undelightful, undoubtful, undutiful, uneventful, unfaithful, unfearful, ungainful, ungraceful, ungrateful, unharmful, unhealthful, unheedful, unhelpful, unhurtful, unjoyful, unlawful, unmerciful, unmirthful, unneedful, unpeaceful, unpitiful, unpowerful, unremorseful, unreproachful, unresentful, unrestful, unrightful, unskillful, unsuccessful, untactful, unthankful, unthoughtful, unthruthful, unuseful, unwatchful, unwilful, unwishful, unworshipful* (see also 4. 61. 3—4).

4. 39. 3.   A few derivatives from verbal bases have been made, as *forgetful* ME, *weariful* 1454 (or from the adj), *bashful* 1548, *wakeful* 1549, *mournful* 1542 *fretful* 1593, *assistful* 1600, *changeful* 1606, *neglectful* 1624, *resistful* 1614, *refreshful* 1637, *resentful* 1656. The meaning is 'apt to . . .' (*bashful* has passive meaning).

4. 39. 4.   The sf is not a formative with adjectival bases, though there are a few out of the way coinages: *grateful* 1552 is an extension of obs. *grate* 'grateful' (= L *gratus*), influenced by *thankful*. There is *direful* 1583 which may, however, be a derivative from sb *dire*. Obs. *tristful* and *fierceful* joined *direful*, being supported by *dreadful*. OE had an isolated *deorcfull* which was used to render L *tenebrosus*. *Gladful*, now archaic, which Jespersen (VI. 23. 2) treats as a deadjectival derivative, is rather derived fr. obs. *glad* sb (OE — 1608).

4. 39. 5.   As for the meaning in desubstantival derivatives, the original sense 'full of . . .' is more or less strongly contained in *awful* ('full of respect' 1593 H), *respectful, sinful, wonderful, beautiful, changeful, cheerful, pushful, deceitful, thankful, hopeful, careful, heedful, graceful, spiteful, successful, meaningful* a.o., originally also in *artful, faithful, wilful, frightful, delightful, sorrowful, doubtful* 'full of fear' (sense obs. now), *shameful* a.o. The shade of 'offering, displaying ...' we find in *fanciful, useful* (*use* 'advantage'), *helpful, gainful*. Another nuance is that of 'causing, exciting, commanding . . .', contained in *awful, fearful, dreadful, respectful* 'commanding r.' (sense now obs.), *delightful, wonderful, shameful, frightful*. The sense 'marked by the characteristic of . . .' is in various shades contained in *lawful, rightful, needful* 'in conformity with need', *manful, masterful*. Several words belong to more than one sense group, as *fearful, hateful, dreadful, hopeful, healthful, wonderful*.

Brimful 'full to the brim' is sometimes pronounced with forestress. The more common and regular pronunciation is, however, that with two stresses, normal with composite adjs of type *snow-white* to which the word belongs.

4. 40.   -ful /fʊl/ (type a mouthful)

is a recent suffix. The type originated in the syntactical group *a mouth full (of soup)* which is found in other Germanic languages, too. As far back as OE we find *handful* as a cpd with plural *handfullis* (q. from the 14th c.). As in ME it was customary to use the singular after numerals (e.g. *two spoon*), we cannot tell from a cb such as *two spoon ful* whether it was felt to be a cpd or a syntactic group. In MoE the plural *-s* is appended to the last element which isolates the combination morphologically. The meaning of the cbs is 'quantity which fills or would fill . . .'. Exs are *bagful, boxful, bottleful, capful, cupful, canful, coachful, houseful, lungful, pipeful, plateful, spadeful, tubful* a.o.

4. 41. 1.   -hoòd /hʊd/

is today a sf, but was like *-dom* an independent word in OE, *hād* meaning 'state, rank, order, condition, character'. Cbs with *hād* as a second-word were thus compounds in OE. The majority of coinings are desubstantival derivatives from a native word, though derivation from a non-native root is not infrequent.

From OE are recorded *knighthood*, childhood, *wifehood*, orig. 'womanhood', *maidenhood, monkhood, bishophood, priesthood, widowhood, youthhood*. ME are *brotherhood, masterhood, Christhood, godhood, manhood, womanhood, sisterhood, fatherhood, fleshhood, neighbourhood*. Later are *motherhood, sainthood* (16th c.), *bodyhood, squirehood* (17th c.), *babyhood, boyhood, girlhood, widowerhood* (18th c.), *bachelorhood, ladyhood, lionhood, spinsterhood, orphanhood, parenthood* (19th c.).

4. 41. 2.   Deadjectival derivatives have been recorded since the ME period. They are less numerous. Their meaning is 'state of being . . .', also 'instance of . . .'. Exs are *falsehood, likelihood* (ME), *lustihood,* obs. *livelihood* 'liveliness' (16th c.), *hardihood* 1634, *gentlehood* 1860. The type is no longer productive and has never been strong, in contradistinction to G *-heit* which at all times has chiefly formed deadjectival sbs (see Wi 289).

4. 41. 3.   The current meaning of derivatives is 'status of . . .', a major group are words for the general natural conditions of human life, as the exs show. Several words, as *wifehood, widowhood, widowerhood* denote civil states with legal rights and duties. *Nationhood* 1850 and *statehood* 1868 'status of . . .' have joined this group.

With the nuance 'time, period' of the respective state occur *childhood, babyhood, boyhood, girlhood.* Other words may denote a concrete collective body, as *manhood, maidenhood, ladyhood, brotherhood, sisterhood, priesthood, serfhood.*

'Nonce-words' with meaning 'status of . . .' are pretty frequent. Exs are *bearhood, cathood, doghood, duckhood, cubhood, tailhood, selfhood, I-hood* a.o.

4. 41. 4.   The sf has an unexplained by-form *-head* (see OED), formerly in more frequent use, but today occurring in *godhead* 'deity', *maidenhead* 'virginity' *lowlihead* 'humility' (arch.) only.

Livelihood 'means of living' is a 16th c. refashioning of ME *lifelood* f. OE *liflād* 'way of life'.

Baugh's treatment of the suffix (p. 225) is unsatisfactory.

4. 42.   **-iána** /ı'enə, ı'ænə, ı'ɑnə/

is a sideline of *-ian,* as in *Shakespearian, Wellingtonian,* and is latinizingly tacked on to proper names, chiefly names of famous persons. The meaning it conveys is 'notable sayings of . . .', or 'sayings, anecdotes, gossip, curious information concerning . . .'. Exs are Shakespeariana, *Byroniana, Burnsiana, Johnsoniana, Walpoliana, Morrisiana, Wagneriana* etc.

Not derived from personal names are *Americana, Mexicana* (not in *-iana* as the adj is in *-an,* too), *anonymiana, omniana* 'information about everything'.

The origin is to be sought in the poetical Latin use of adjs in the neutre plural (*Ciceroniana, Virgiliana*) and, possibly, the influence of French where the type goes back to the 16th c. has played a part. An early English coinage is *Scaligeriana* 1666, but other words crop up in the 18th c. only.

The suffix, at one time, was so much in use that it became an independent word: *ana* (first rec. 1727).

As the sf is usually tacked on to proper names of persons, *-iana* is the regular form (as *-ian* is the regular sf for the adjs).

4. 43. 1.   **-ic** /ık/

represents L *-icus* (as in *classicus, civicus, domesticus*) and OGr *-ikós* (latinized as in *comicus, criticus, poeticus*), adjectival sfs denoting appurtenance. The first *-ic* words that make their appearance in English, come in through the medium of French (where *-ique* is one of the most productive adjectival

sfs), and so far as loans are concerned the direct source of an English word is often difficult to ascertain. Words such as *ecliptic, economic* are either from French or from Latin direct.

4. 43. 2.   From about 1600 we have Ecs in -*ic*, chiefly scientific terms (wffb). "In Chemistry, the suffix -*ic* is specially employed to form the names of oxygen acids and other compounds having a higher degree of oxidation than those whose names end in -*ous*" (OED s.v. -*ic*). Exs are *cerebric, ceric, cerotic, chloric, clysmic, ferric, ferulic, formic*.

4. 43. 3.   The sf is used with derivatives from ethnic names, in imitation of Latin words such as *Germanicus, Gallicus, Celticus, Teutonicus, Lombardicus*. From the 17th c. are recorded *Germanic, Celtic, Teutonic, Lombardic, Finnic, Gallic*, without a Latin pattern *Icelandic* 1674. In modern use, -*ic* words used as primaries denote the language, with a pronounced scientific tinge. Exs are Turkic, *Mongolic, Finnic, Ugric, Tungusic, Samoyedic, Icelandic, Greenlandic, Lettic, Arabic, Semitic, Ethiopic, Persic, Wendic* a.o.

After loans from Latin (such as *Platonic, Socratic*) have been formed (wffb) Miltonic, *Byronic, Cervantic, Anacreontic* a.o.

Learned words (partly wffb, partly wfnb) from various other domains are *domic* 'pertaining to a dome', *funic* 'pertaining to the umbilical cord' (L *funis*), *gentilic* (an extension of L *gentilis*), *lavatic* 'consisting of lava', *operatic* 'pert. to opera' (with the L sf -*aticus* fr. sbs in -*a*, cp. *aquaticus, schematicus, dramaticus*), *bardic, skaldic* (from the 'field' of *poetic, lyric, harmonic*), *aldermanic* (attracted by other words in -*manic*, as *Germanic, Romanic*), *felspathic* (from the 'field' of *geographic, geologic, metallic*), *chivalric* (perh. after *heroic*), *oratoric* (after *rhetoric*), *goliardic, totemic, charlatanic, daemonic, hormonic* a.o.

4. 43. 4.   The stress is on the syllable preceding -*ic*, i.e. the words are formed on a Latin basis, coined as representing NL words in ⌐*icus*. The word *chivalric* 1797, however, is usually stressed on the first syllable, on the analogy of *chivalrous*. There are a few more -*ic* words which are stressed on the antepenultimate, as *Arabic* 1391, *lunatic* 1290, *politic* 1420, *catholic* 1425, *heretic* 1330, *choleric* 1340. These words were taken from OF (though F *lunatique* is not rec. before the 14th c.), and OF words with more than one syllable before the stress had a rhythmic secondary stress which in English became the main stress. Otherwise there is a marked tendency to stress adjs in -*ic* on the penultimate. *Arithmetic* and *arsenic* are so stressed whereas the stress is on the antepenultimate when the words are sbs. *Phlegmatic, pleuritic, schismatic, splenetic* were at the end of the 18th c. still stressed on the antepenultimate (see Jesp. I. 5. 66). *Cadaveric* 1835 is usually stressed on the antepenult (homological stress), in AE always so.

See also -*ical* (under -*al*). For the stress history see B. Danielsson, pp. 162—187.

4. 43. 5.   Substantival derivatives from adjs in -*ic* are not only in -*icity* as the OED has it (s.v. -*ic* and -*icity*; cp. also the misleading statement: "Adjectives pertaining in sense to sbs. in -*ism* are formed in -*istic*; e.g. *atheism, atheistic; naturalism, naturalistic*", OED s.v. -*ism*), but many are in ⌐*icism*, others following the correlative pattern -*ic*/-*ism*. The semantic differences

are determined by the character of *-ity* (denoting abstract quality) and *-ism* (chiefly 'condition, nature'; many terms from biology and physiology; 'system, attitude'). Cp. *alcoholicity* 'alcoholic quality', *alcoholism* 'diseased condition' etc. *catholicity* and *catholicism* (see sfs *-ity* and *-ism*). I will give exs for each type, but it will be noted that some *-ic* adjs have derivatives both in *-icity* and *-ism*.

a t o m i c / a t o m i c i t y, *alcoholic/alcoholicity, catholic/catholicity, domestic/ domesticity, eccentric/eccentricity, electric/electricity, elastic/elasticity, historic/ historicity, public/publicity, rustic/rusticity* etc.

a n t h r o p o m o r p h i c / a n t h r o p o m o r p h i s m, *atavic/atavism, barbaric/barbarism, chemic/chemism, egocentric/egocentrism, embolic/embolism, encyclopedic/ encyclopedism, endomorphic/endomorphism, eugenic/eugenism, faradic/faradism, gigantic/gigantism, hedonic/hedonism, heroic/heroism* etc. All adjs in *-bolic* (*embolic, symbolic*), *-matic* (*astigmatic, rheumatic*), in *-tropic* (*isotropic, phototropic*) follow the same type.

a g n o s t i c / a g n o s t i c i s m, *catholic/catholicism, eclectic/eclecticism, sceptic/ scepticism, stoic/stoicism, classic/classicism, romantic/romanticism* denote systems and their respective followers.

4. 43. 6. The preceding alternations do not, however, exhaust the derivative patterns. From the point of view of structural analysis the derivative system of foreign-coined words in *-ic* is rather complex. Most of the words are ultimately Greek, and OGr *-ikós* was very prolific. Thus the adoption of countless Greek words and the coining of others after their derivational patterns has introduced the anomalous system of Greek morphology into English. Of the numerous alternations this involves for the problem of wf I will give some of the major correlative patterns only.

4. 43. 7. -y/-ic. Most words in *-y* (ultimately repr. OGr *-ia*) derive adjs in *-ic*. This concerns words in *-gamy, -graphy, -logy, -metry, -nomy, -scopy* and many others. Exs of alternations are *monogamy/monogamic, geography/ geographic, philology/philologic, geometry/geometric, astronomy/astronomic, microscopy/microscopic* etc. etc.

4. 43. 8. -ia/-ic. Most learned words in their NL form in *-ia* (ult. OGr *-ia* like preceding *-y*) derive adjs in *-ic*. Exs are *anaemia/anaemic, hydrophobia/ hydrophobic, analgesia/analgesic, amnesia/amnesic* etc. But from *-ia* words there are other *-ic* derivatives beside: *amnesia* derives both *amnesic* and *amnestic*, *diphtheria* derives *diphtheric, diphtheritic* (and *diphtherial*).

4. 43. 9. -sis/-tic. Most (ultimately Greek) words in *-sis* (regularly so all words in *-lysis*) derive adjs in *-tic*. Exs are *genesis/genetic, mimesis/mimetic, anabiosis/anabiotic, electrolysis/electrolytic* etc. (but *basis/basic*).

4. 43. 10. -itis/-itic. Words in *-itis* (denoting diseases, chiefly of an inflammatory kind) regularly derive adjs in *-itic*. Exs are *bronchitis/bronchitic, encephalitis/encephalitic, enteretis/enteritic*.

4. 43. 11. -ite/-itic. Words in *-ite* regularly derive adjs in *-itic*. Exs are *anthracite/anthracitic, dynamite/dynamitic, monophysite/monophysitic, parasite/ parasitic*.

4. 43. 12. -cracy/-cratic. Words in *-cracy* (ultimately repr. OGr *-kratía* which gave ML *-cracia*, OF *-cracie* whence E *-cracy*) are matched by adjs in *-cratic* (from adjs in *-atique* the corresponding sbs in *-ate* were back-derived in French, and the earliest *-at* words in English, *aristocrat* and *democrat*, are loans from French). Exs are *aristocracy/aristocratic/aristocrat*, *democracy/ democratic/democrat*, *plutocracy/plutocratic/plutocrat*, i.e. the adjs appear at the same time derived from the sbs in *-at*. The pattern has been extended to *diplomacy/diplomatic/diplomat*.

4. 43. 13. Words ultimately representing OGr words in *-ma* derive adjs in *-matic*. This concerns the types *problem/problematic, epigram/epigrammatic, drama/dramatic*. Exs are

problem/problematic, *axiom/axiomatic, emblem/emblematic, diaphragm/ diaphragmatic*. With regard to its origin (OGr *aphorismós*), *aphorismatic* has irregularly entered the group.

epigram/epigrammatic, *diagram/diagrammatic, chronogram/chronogrammatic, monogram/monogrammatic* etc., but no words in which *-gram* has the connotation of 'message'.

drama/dramatic, *aroma/aromatic, asthma/asthmatic, cinema/cinematic, dogma/dogmatic*.

4. 44. 1. -ícian /ˈɪšən/

is a sf with personal sbs, denoting one skilled in some art or science. In ME we have borrowings from OF such as *physician* c 1225, *magician* c 1384, *musician* c 1374, *rhetorician* 1425, *logician* 1475, *mathematician* 1432, orig. spelt *-ien* in the French way, in the 16th c. adapted to sf *-ian*. The word *mathematician* was followed by the Ecs *geometrician* 1483, *arithmetician* 1557, obs. *algebrician* (1579—1680), *theologician* 1560 (now rare). The loans in *-icien* were all matched by earlier loans ending in *-ic*, as *physic, magic, music, rhetoric, logic, mathematic*, denoting an art or science, which established the correlation *-ician/-ic* (resp. *-ics*). Exs of this correlative type are mechanician 1570, *obstetrician* 1828, *rubrician* 'one who studies liturgical rubrics' 1849, *ethician* 1889 (rare). Derivatives from *-ic* words of another kind are *technician* 1833 and *clinician* 1875. *Academician* is F *académicien*. The now obs. word *simplician* 'simpleton' (common c 1600—1650) is derived from the stem of *simplic-ity*.

4. 44. 2. The pattern *-ician/-ic(s)* is more common in its extension -tician/ -tic(s). Exs are (beside the words quoted above) *practician* 1500, *politician* 1588, *dialectician* 1693 (need not be F *dialecticien*, OED), *tactician* 1798, *elastician* 1885 'one who is conversant with the science of elastic-ity', *syntactician* 1900 (after *tactician*), *statistician* 1825, *phonetician* 1848, *theoretician* 1886.

4. 44. 3. Recent American English has produced such irregularly coined words as mortician 'undertaker' (in use since about 1917, see MeAL[4], 287), *beautician* 'one who runs a beauty parlor', *cosmetician, asphaltician, bootician* 'bootlegger'. In several, *-tician* has become a quite independent element, not in line with the regular patterns. In Hollywood the word *dialogician* (as con-

nected with *dialogue*) is used (after *logician*). *Dietician* 1846 f. *diet* (under the influence of *physician*) is also orig. an Americanism.

F *-icien* represents an extension of L *-ianus*, i.e. *-ianus* appended to a stem in *-ic*, as if L *-icianus*. The only instance of an extended Latin basis in *-icius* appears to be L *patricius* which became *patricien* in French (14th c.) and was adapted as E *patrician* 1432 (first in Higden, spelt *patricion*).

4. 45. 1.   -ie, -y /ı/[1]

is a hypocoristic sf, either tacked to the full noun (regularly so with common nouns) or to a shortened or endearingly modified form of a name, first or last name (*Charlie* f. *Charles, Bonny* f. *Bonaparte*). The original type is C h a r l i e (sf with personal proper names) which in Scotch is recorded about 1450.

As for the origin of the sf, the OED explains it from names like *Davy, Mathy* which rendered OF *Davi, Mathé*, "which have the appearance of being pet forms of *David, Mathou*" (OED, s.v. *-y* suffix[6]). 'For whom?' we naturally ask. When there was no sf and accordingly no possibility of hypocoristic interpretation of the final *-y*, the termination was hardly capable of being transferred to other names. Almost the same theory had been upheld before by Höge (19—20). A paper by K. F. Sundén, valuable for its documentation, does not throw much light on the origin of the sf. According to S., the *-y* extension (originating in Scotch with personal names) had at first no hypo- coristic touch at all, but arose as a mere onomastic extension form mono- morphemic names — Old English (as *Wolsi* f. *Wulfsige*), French (as *Aubry, Mary*), or Scandinavian (*Aki, Alli*). But extended names of the type *Charl-ie* "were not necessarily coined for endearing purposes" (163). It is not quite clear then how the hypocoristic function came into existence. S. thinks that such names as *Addy, Batty, Roby, Willi* received endearing force as "their correla- tive forms without *-y* also had this function" (164). But then, the argument we have raised against the explanation of OED comes up again. It is difficult to conceive of extension from words which were not analysable as two-mor- pheme words. Reinterpretation usually presupposes bi-morphemic character of a pattern (see 4. 1. 6—7). It seems to me much more probable that /ı/ arose spontaneously as an expressively motivated morpheme whose symbolic value has been so brilliantly described by Jespersen. The English sf is parallel to G *-i* (not only used in Swiss German, as Jespersen thinks) in *Willi, Hansi, Uli, Pappi, Mammi* etc. for which no historical connection need be assumed. The vowel *i* has general symbolic value. Why the symbolic value of *i* came to life so late (not before 1400) is difficult to explain. A parallel case would be diminutive LL *-ittus, -itta* which is found in late Latin inscriptions only, while earlier stages show no trace of it.

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[1] Sundén, K. F., On the origin of the hypocoristic suffix *-y* (*-ie, -ey*) in English (Sertum Philologicum Carolo Ferdinando Johansson oblatum. Göteborg 1910, 131—170). — Jespersen, O., Symbolic value of the vowel *i* (Linguistica, Copen- hagen 1933, 283ff.). — Eckhardt, E., Die angelsächsischen Deminutivbildungen. Engl. Studien 32 (1903) 325—366. — Höge, O., Die Deminutivbildungen im Mittelenglischen. Heidelberg 1910 (= Anglistische Forschungen 31), 166—265. — Grimm, J., Deutsche Grammatik 3. 637—683. Gütersloh 1890.

4. 45. 2.   Pet forms of proper names are first found in Scotch. To the south
they spread later. A few exs may suffice: *Anny* (Anne), *Billy* (William),
Bobby (Robert), *Bessy* (Elisabeth), *Davy* (David), *Dolly* (Dorothy), *Fanny*
(Frances), *Georgie, Harry, Jacky, Jonny, Jimmy, Tommy, Reggie* (Reginald)
etc. etc. See also 'Clipping' 9. 2. 5. For the use of the sf with surnames see
9. 2. 6.

Pet names have frequently passed into the category of common sbs: *kitty*
(Catherine) 'young girl' 1500, *lowry* (Laurence) 'fox' 1500, *jockey* (John and
Jack) 1529 (in current sense 'professional rider' 1670), some more in Scotch
(see Sundén p. 137), *jenny* (Janet, various senses) 1600, *tony* 'fool' 1654—1784,
dolly (various senses) 1648, *johnny* 'chap' 1673, *molly* (Mary) 'wench, pro-
stitute, effeminate man' 1719, *jemmy* (James) 1753 in various senses, also in
form *jimmy, jerry* (Jeremiah) 'hat, machine' 1841, *peggy* 'simpleton' 1869
a.o. See also 'Compounding'.

4. 45. 3.   Hypocoristic derivatives from common sbs are more modern. The
first word recorded is b a b y 1377 (f. *babe*). No others are found before 1500.
Daddy (f. *dad*) is rec. 1500, later are *mammy* (f. *mam*) 1523, *brownie* 'kind
goblin' 1513, *laddie* 1546, *kiddy* 1579, orig. 'young goat'. *Noddy* 1530 may be
a nursery word for a doll that nods, following *puppy* 1486 'toy dog' which
seems to be F *poupée*. Most of the words belong to the nursery, as we see.
From the same sphere are *dummy* (f. *dumb*) 1598, *grannie* 1663. But the sf
was also used outside the nursery domain; though perhaps in imitation of it:
ninny 1593 (prob. in imitation of children's language, not 'f. *innocent*', OED),
dearie 1681, *mousy* 1693, *hubby* 'husband' 1688. From the 18th c. are *lassie,
lovey, dovey, birdie, auntie, sweetie, titty* 'nursery word for teat'. 19th c. and
later are *blokey, cooky, ducky, doggie, froggy, mannie, mummy, sissy* (with
depreciative shade, f. *sister*), *slavey* / *blackie, darkie, fatty, meany, smarty,
softy, toughie*. The sf hax a negative charge, so to speak, conveying a disparag-
ing sense outside the endearing sphere where alone it is serious as to its emo-
tional value. Cp. also 'Clipping' for clipped words to which the sf is tacked.

Words containing the pet sf have never more than two syllables. As for the
spelling, there are no strict rules. Certain tendencies may be observed for
which the reader is referred to OED (s.v. -*y* suffix[6]).

4. 45. 4.   Our sf has developed the by-form -sy. Regular in *Bessy, Trixy,
Chrissie, Elsie*, -*sy* was appended to other names where it had no place by
rights. We find it in B e t s y, *Tetsy* (Elizabeth), *Magsie* (Margaret), *Nancy*
(Anna), *Timsie* (Timothy), *Patsy* (Patrick).

It forms also common sbs such as *boysie, chapsie, ducksy, mumsie, mopsy*
(f. *mop* 'woman', sl), and in geminated form *kicksy-wicksy* 'woman' (Sh), and
hotsie totsie 'pretty girl' AE, and such nursery words as *tootsy-wootsies* (f. foot)
and *popsy-wopsies* 'children'.

4. 46. 1.   ⊥ifȳ, ⊥‑fȳ /ɪfaɪ, faɪ/

is ultimately L -*ificare*, from the same root as *facere* 'make'. With the basic
meaning 'make' it formed a few verbs in Classical Latin (the older type being
-*facere*, as *tepefacere, calefacere, patefacere*), as *aedificare, amplificare, magni-*

ficare, pacificare, sacrificare, terrificare, more in Late Latin, as *dulcificare, glorificare, purificare, rectificare, sanctificare, vilificare*, and grew exceedingly frequent in Medieval and Modern Latin: *quantificare, ratificare, certificare, verificare* (ML), *stratificare, electrificare* (NL). Old French had many verbs of the type. Originally, these verbs ended in *-efier* (whence EME words in *-efy*), but under the influence of Latin, *-ifier* became the established form. Except for a few words such as *calefy, liquefy, rubefy, satisfy, stupefy,* English loans from French ended in *-ify*, as *amplify, certify, edify, glorify, modify, magnify, purify, rectify, sanctify, verify* (all ME), and *-ify* has remained the form in which French verbs in *-ifier* and Latin verbs in *-ificare* (occasionally in *-facere* also) were adapted.

4.46.2.   15th c. and later adaptations are *pacify* (L, F), *vilify* 1450 (L), *qualify* 1540 (F, L), *quantify* 1840 (NL), *stratify* 1661 (NL), *terrify* 1575 (L, F *terrifier* is not rec. before 1795), *dulcify* 1599 (L, F *dulcifier* 1653), *gratify* 1540 (F, L), *stultify* 1766 (LL) etc. The common meaning of these verbs was 'make, convert into, bring into the state of . . .'. From the 16th c. on English has formed both desubstantival and deadjectival derivatives. The basis of coining is either Latin, as in c a r n i f y 'convert into flesh', *chondrify* 'turn into cartilage' (f. Gr *chóndros*), or native, as in b e a u t i f y, *steelify* etc.

4.46.3.   From native sbs are derived *beautify, fishify* (16th c.), *ladify, steelify, stonify, countrified* (17th c.), chiefly used contemptuously since about 1700, with the implication 'make look like, give the (undesirable) appearance of . . .', as *toryfy, whiggify, speechify, monkeyfy* (18th c.), *cockneyfy, whiskify, dandify, stiltify* (19th c.). *Yankeefy, negrofy, russify, frenchify, turkify* are not complimentary, nor is *hornify* 1607 in the obs. sense 'cuckold', though *townify* 1777 and *citify* 1883 have no such tinge. After *speechify* 1723 were formed *argufy* 1751 and *preachify* 1775, with a facetious flavor. *Airified* 1864, as applied to style or manner, has a derogatory nuance, too. The word d e n a z i f y, much used after World War II, may be quoted in this connection. Jespersen (VI. 25.11/12) has exs like *Shelleyfy, Swiftify, Popify* with the same depreciative tinge. Being semi-scientific, the word *trustify* 1902 'convert into a trust', used in commercial slang, enters the learned group of words which is free from any disparaging or ridiculing tinge.

4.46.4.   A few words have been coined as deadjectival derivatives, as u g l i f y 1576, *happify* 1612 (now chiefly AE), *hornify* 1670 'make horny' (different fr. desubst. *hornify* 'cuckold'), *daintify* 1780, *tipsify* 1830, *drowsify* 1872, *prettify* 1850, with the same derogatory tinge as the prec. group.

Not Standard are such words as *apefid, bullified, funkify* (OED s.v. *-fy*), *creepified* 'creepy', *faintified* 'faint', *fitified* 'subject to fits', *rainified* 'rainy' (ADD), *foozlify* a.o. (q. Jesp. VI. 25.12).

4.46.5.   The learned current of coining on a Latin basis, on the other hand, has never been interrupted. We find such words as *historify, lenify, nullify, virtify, vivify* (16th c.), *aurify, carnify, cornify, diabolify, divinify, minify* (after *magnify*), *brutify, typify* (17th c.), *acidify* 1797, *acetify, carbonify,*

chondrify, cretify, gasify, lignify, objectify, ozonify, subjectify, verbify (19th c.) with meaning 'convert into, make . . .'.

The sf is usually quoted as *-fy* (so also OED). However, with the exception of *negrofy* and *argufy*, all words end in *-ify* which is the suffix in its real form. Stems ending in [ɪ] drop this before the sf.

4. 47. 1.   -ine, -in /aɪn, ɪn, ɪn/

is ultimately L *-īnus* (which is related to E *-en* in t. *wooden*), one of the several *-n-* sfs denoting appurtenance. In AL *-inus* forms adjs with the meaning 'pertaining to' on the following types: *femininus* (derivatives from personal sbs), *anserinus* (derivatives from sbs denoting animals), *marinus* (derivatives from sbs denoting places), *Saturninus, Alpinus, Tarentinus* (derivatives from proper names). Latin adapted also a few Greek words in *-īnus* (with the same sense), as *adamantinus, amethystinus, corallinus, crystallinus* which were, however, subsequently treated as words in *-īnus*.

4. 47. 2.

The English pronunciation of early loans, such as *masculine, feminine, Latin* (formerly *Latine*), *libertine, sanguine* (ME), *genuine* 1596 a.o. is [ɪn]. The MoE tendency is, however, to pronounce L *ī* = [aɪ], and under learned influence the pronunciation of a word has sometimes been refashioned (as in *divine*). On the other hand, the co-existence of two pronunciations gave rise to variants with other words, too. Most of these adjs are NL scientific words (though they may go back to Ancient Latin). There are adjs used as primaries which denote names of genera in natural history, as *accipitrine, bovine, caprine, equine, feline, murine, passerine*. Many derivatives from names of animals and minerals which have AL patterns are used as adjs, as *adamantine, crystalline, canine, equine* and others coined after them on a Latin basis of coining, as *olivine, opaline, alkaline, saccharine*, also used as primaries. *Riverine* 1860 is an isolated word derived on a native basis of coining.

Of the AL type *Saturninus* are such words as *Petrine, Pauline, Johannine*.

4. 47. 3.

In French, the substantival use of adjs led to the coining of names for chemical materials in *-ine* (the feminine prob. caused through obvious association with *matière* which was silently understood), type *aniline*. English imitated this use, which accounts for the prevailing pronunciation [ɪn], recognizable also in the spelling *-in* to which *-ine* has often been reduced. Exs of words denoting chemical products are *atropine, camphine, benzine, benzidine, glycerine, methylamine, nicotine, neurine, strychnine, gasoline, vaseline* etc. etc.

Bromine, chlorine, fluorine, iodine, which are names of elements, also have the sf whereas in French and German the corresponding words are without it.

The preceding type has been imitated in countless trade names of medicines, cosmetics and the like, as *brilliantine, aspirine, dolantine, atroverine, albertine, grenadine, nevralgine* etc. etc. These formations are not restricted to E; the type is international.

As we have already pointed out, the spelling in the chemical group is often *-in* (*stearin, aspirin, amygdalin, chlorin* a.o.). In systematic nomenclature *-ine* is, however, used for organic bases and alkaloids (*quinine, strychnine*) while

-in is employed for neutral substances (*stearin, palmitin, gelatin, amygdalin*). Non-scientific usage does not, however, respect this distinction. We will hardly find any other form than *gasoline*.

4. 47. 4.   In organic chemistry, names of hydrocarbons (in the systematic nomenclature proposed by Hofmann, 1866) have an *-n-* suffix, which occurs in the variants -ane, -ene, -ine, -one. The last three are said (see OED *-ane* suff.) to represent OGr *-ēnē, -īnē, -ōnē*, feminine patronymic endings after which *-ane* was coined to complete the series (*-une* was also proposed by Hofmann, but has not been used). The question is not important, however, as the series of sfs is rather arbitrarily formed with the vowel signs of the alphabet. The strongest sf is *-ene* /in/, found in such words as *abietene, anethene, asphaltene, acetylene, benzene, camphene, ethene, kerosene, methene, propene, styrolene* a.o. The sf *-ane* is weaker. Exs are *butane, ethane, pentane, hexane, octane, propane*. Seldom used are *-ine* (as in *ethine, propine*) and *-one*, as in *propone, quartone, pentone, sextone* (*-one* is also more vaguely used for other chemical derivatives, as in *styrone, valerone*).

4. 48. 1.   -ing /iŋ/ (type cutting)

is originally the ending of the gerund, a rival form of OE *-ung* (which had disappeared by about 1250). Corresponding forms are found in all Germanic languages. As a formative of the gerund it does not much interest us here. But *-ing* has developed a series of functions and meanings which place it within the sphere of wf, outside the scope of the action noun proper. The semantic shades with which *-ing* forms words have existed from the earliest periods of the language though the center of semantic gravitation has considerably changed.

-ing sbs denote the generic act, fact, practice of what the verbal idea implies. These sbs are possible with any vb; they are generally termed gerunds or verbal nouns. This use has been established in the language since the 14th c.

The *-ing* sb denotes a specific instance of what the verbal idea implies, as *liking, licking, helping, serving* (as of food), *blessing, christening, wedding, meeting, sitting, outing, merry-making, warning, painting* etc.

4. 48. 2.   The *-ing* sb denotes something material connected with the verbal idea, as an agent, instrument, result, belongings, place (parallel to the syntactical notions of subject, object or subjunct). Exs are *coating, covering, clothing, filling, stopping, lining, shortening* 'fat', *binding, wrapping, swelling, winding, turning, opening, surroundings, couplings, bedding. Knitting, lacing* 'shoestring', *furring, glazing, lading* 'freight', *lashing* 'cord', *marketing* 'ware', *makings* 'material', *mounting, moorings* 'rope', *notching* 'incision', *plastering, sewing, stitching, stuffing, dwelling, lodging, diggings, landing, standing.*

Denominal are *walling* 'wall work, walls coll.' 1382, *piling* 'mass of piles, pilework' 1488, *carding* 1468, *railing* 1471, *timbering* 1486, *listing* 14.. 'material of which the list of cloth is composed' (fr. *list* 'border, strip', there is no vb). The meaning is either 'the collectivity of . . .' or 'material for . . .'. Later exs are *channeling* 1580, *fencing* 1585, *paling* 1558 H, *plaiding* 1566, *shelling* 'husks' 1598, *tiling* 1526 H, *towelling* 1583, *sheathing* 1587, *shirting* 1604 (no

vb), *looping* 'material' 1647, *masting* 1627 'masts coll.', *flooring* 1624, *matting* 1682, *pegging* 1611, *piping* 1660 'pipelike trimming in dressmaking', *quilting* 1611, *grating* 'framework etc.' 1636, *tabling* 'table linen' 1640, *sacking* 1707, *sheeting* 1711, *planking* 1751, *sugaring* 1740, *plumbing* 1756, *lathing* 'lathwork' 1756, *icing* 1769, *silvering* 1710, *leggings* 1763, *skirting* 'border' 1764, *tinning* 'coating' 1761, *hatting* 'material' 1796, *carpeting* 1806, *lettering* 'the letters inscribed' 1811, *gearing* 1825, *plating* 1833, *plugging* 1875, *poling* 1842, *slating* 1816, *shirring* 1892, *skidding* 'planks used as support' 1859, *steeling* 1869, *trousering* 1883, *tubing* 1845, *sandaling* 1881, *hop-sacking* 1884, *jacketing* 1851, *shafting* 'system of shafts' etc. 1825, *wicking* 'cord, fibre for wicks' 1837, *skirting* 'material' 1825, *banding* (recent, not in OED or Spl.).

A somewhat different concrete sense underlies such words as *necking* 'part of a column' 1804 (Arch.), *nosing* 'end of a bench' etc. 1771, *siding* 'additional side-track' 1825, *shoaling* 'shallow place' 1574, *mouthing* 'entrance to a mine' 1883, *wharfing* 'structure in the form of a wharf' 1691.

As a formative of sbs with a concrete meaning -*ing* is very strong. In this respect, zero derivatives are no rivals; it is necessary to point this out as Biese's conspectus (p. 309) is apt to give a wrong impression. Denominal -*ing* is not affected, anyway.

4. 48. 3.   *Ing-* sbs are often doubly connected, so it cannot always be said with certainty whether this or that word has been derived from the vb or the stem sb. *Lettering* 1645 was probably coined as a vs with the now obs. meaning 'letter-writing', but in the present sense of 'letters inscribed' it is certainly denominal. Whether *wadding* 1627 is derived from the vb 1579 or the sb *wad* 1540, cannot be decided, though present-day analysis certainly connects it with the sb. *Ceiling* is difficult: the word is first recorded 1380; the vb does not occur before 1428 and is obviously back-derived from it as it means 'furnish with a ceiling'. A sb **ceil* does not occur; obs. *cyll* 'canopy', which is prob. cognate with *ceiling*, is recorded 1552.

4. 48. 4.   There are also derivatives from locative particles. *Inning* is OE in sense 'income' etc., but in senses 'lands taken in', 'time during which a person, a party etc. is 'in'' etc. the word is modern. *Offing* 'off part, remote part' etc. is recorded 1627. *Outing* is recorded as early as 1440. To the same group belong *easting* 'approach to an easterly direction' 1628, and *westing* 'distance made towards the west' etc. 1628.

The -*ing* type is much weaker than the corresponding German -*ung* type. This is quite natural if we consider that by the side of -*ing* there are -*age*, -*al*, -*ance*, -*ence*, -*ation*, -*ment* and zero-derivatives. As for sfs, German has only -*ung*.

4. 48. 5.   Sbs denoting the concrete result of the verbal action are especially frequent, most often in plural form. Exs are c u t t i n g, *building*, *drawing*, *etching*, *pencilling*, *writing*, *scoring*, *laying* 'coat of plaster', *lending* 'money lent' |*dightings*, *winnowings*, *siftings*, *earnings*, *savings*, *diggings* 'result', *meltings*, *mowings*, *loppings*, *leavings*, *skimmings*, *scrapings*, *shavings*, *shearings*, *sweepings*, *knockings* (mining term = 'small pieces broken off from stone by hammering'), *stampings*, *spawlings* 'expectoration' (archaic).

Ing- sbs do not commonly denote abstract result. Exs are *earnings* in the obs. sense of 'gain, profit' 1200, *learning* 'knowledge' 1340, *finding* in sense 'verdict of a jury' etc. 1859 H.

4. 48. 6. As a result of zero derivation, *-ing* sbs from denominal vbs came to be felt connected with the vb as well as with the sb underlying the formation. The process sets in in the 14th c. but does not grow common before the 16th c. and has been exceedingly frequent since the 19th c. Exs are *staging* 1323 'scaffolding' (vb *stage* 'build' 1330 is rare, the OED has only one quotation, so *staging* is more probably derived from the sb *stage* 1300), *trapping* 1398 (the vb is chiefly used in the second ptc, moreover, no gerund is recorded), *stabling* 1481 'stable buildings collectively' (no connection with the vb), *tailing* 'tail-rope' 1495 (no vb rec. before 1663), *roofing* 1440 (the vb is first quoted 1475), *housing* 1400 'houses collectively' (see 4. 58. 3).

4. 49. -ing /ɪŋ/ (type s w e e t i n g)

is the basis of *-ling*. In OE it was very productive, forming various kinds of denominal sbs (see OED s.v. *-ing³*). Its productivity hardly survived into Middle English. Coinages that have been made since the Middle English period, are chiefly names for varieties of apples. Most of the words are dead-jectival derivatives, as s w e e t i n g 1530, *wilding* 1525, *greening* 1600 (also denoting a variety of pear), *russeting* 1607, *souring* 1846. Desubstantival are *queening* 1430 and *golding* 1580.

A few other derivatives are *lording* 1200 (f. *lord*, perh. coined after *atheling*), *fairing* 'present from a fair' 1574, *golding* 1580 in sense 'gold coin' (cp. *shilling*, *farthing* OE) / *sweeting* 1300 'sweet, beloved person' (perhaps after *littling* 'little child' OE), *gelding* 1382 (f. *geld* 'barren' 1230; the OED gives ON *gelding* r as the origin), *whiting* 14.. (a fish; the OED assumes MDu *wijting* as the origin).

Bunting 1300 (name of a bird) and *hilding* 1582 'worthless person or beast' are of uncertain etymology.

4. 50. 1. -ish /ɪš/

is an adjectival sf with various functions and meanings. Since OE times it has been used to derive ethnic adjs, causing *-i* mutation in *English*, *Welsh* (OE *Welisc* f. *Walh*), *French* (OE *frencisc*, as against OE *Franca* 'Frank'). OE *scyttisc*, *denisc* were in ME refashioned into *Scottish*, *Danish*, after *Scot*, *Dane*. The type has proved productive to the present day. Exs are B r i t i s h, *Celtish*, *Czechish*, *Finnish*, *Flemish*, *Icelandish*, *Irish*, *Israelitish*, *Jewish*, *Jutish*, *Keltish*, *Kentish*, *Lettish*, *Netherlandish*, *Polish*, *Swedish*, *Turkish*. *Greekish* (still used by Milton) is no longer used.

4. 50. 2. With the same basic meaning of appurtenance the sf is tacked on to other sbs. In OE we find such words as *cildisc*, *cirlisc* or *ceorlisc* 'churlish', *eorlisc*, *mennisc* 'human', *hæþenisc* 'pagan', *inlendisc*, *ūtlendisc*, *folcisc* a.o., meaning 'of the nature of . . .'. Since the ME period the sf has, however, been used to convey a derogatory shade. The nuance perhaps arose from *ceorlisc*

and *hǣþenisc.* ME are *elvish,* feverish, *foolish, goutish* 'predisposed to gout', *swinish, wolvish, womanish.* Later are recorded *dronish, elfish, fennish, fiendish, girlish, hellish, hoggish, lumpish, monkish, popish, Romish, qualmish, roguish, snakish, waterish, whorish, wifish* (16th c.), *fairish, freakish, hornish, mobbish, modish, monkeyish, owlish, swainish* 'boorish', (17th c.), *hippish* (f. *hip* 'hypochondria'), *liquorish, mulish* 'stubborn', *piggish, priggish, stylish, summerish* (18th c.), *swellish* 'dandified', *vixenish, vulturish, wispish* (19th c.). Other exs are *bookish, apish, boyish, boorish, brutish, dwarfish, clownish, mannish, prudish, skittish, sheepisch.*

4. 50. 3.   There are a few deverbal coinages, as snappish 1542, *mopish* 1621 'given to moping', and *peckish* 1785 'disposed to peck or eat'. *Ticklish* may be from the verb or the old adj *tickle.*

In colloquial and journalistic use, *-ish* is also tacked to cpds, proper names and phrases, with the same derogatory nuance as the desubstantival group: *Heineish, Marc Twainish, Queen Annish, Chelseaish, West Endish, New-Dealish, stand-offish, at-homeish, public-schoolish, old-masterish, out-doorish, schoolboyish, undergraduatish.*

4. 50. 4.   From particles are derived *uppish* 'arrogant, proud' etc. 1678 and *offish* 'inclined to keep aloof' 1830. Derivatives from pronouns are *selfish* 1640 and the quite recent AE word *ittish* 'sexually attractive'.

Peevish 1393 fits in semantically, but the word is of uncertain etymology.

4. 50. 5.   As far back as the second half of the 14th century we find *-ish* tacked on to adjs denoting color. Yellowish 'of the nature of yellow' 1379 perh. arose as a desubstantival derivative, with *yellow* taken as a primary. Other exs are *greenish* 1384, *reddish, whitish* 1398, *bluish* 1400, *blackish* 1500, *brownish* 1555, *greyish* 1562, *purplish* 1562, 'nearing, but not exactly . . .'.

From its use with adjs denoting color the sf was extended to other adjs with the same nuance of approximation. The adjs are chiefly 16th c. and later. Exs are *darkish* 1398, *baddish, coldish, goodish, dryish, largish, lightish, longish, shortish, smallish, biggish, narrowish, thinnish, youngish, oldish, latish* etc.

4. 50. 6.   Recent (20th c.) is the use of *-ish* with numerals, chiefly used to denote approximate age or time: fortyish, *sixtyish* etc. 'about . . . years of age', eightish, *ninish* etc. 'about . . . o'clock'. It may also be used of the grades of a student, as in *eightish* 'having about an eight'.

4. 51. 1.   **-ism** /ɪzm/

forms abstract sbs (wffb and wfnb). Scientific words signify 'doctrinal system of principles'. The principles may be of a religious, philosophical, political or literary character. Exs are Christianism, *paganism, Judaism, catholicism, protestantism, gallicanism, Lutheranism, Lutherism, Calvinism* etc. / *Aristotelism, Platonism, Thomism, Scotism, Leninism, marxism, existentialism, nominalism, realism, idealism, hedonism, behaviorism* / *communism, socialism, nationalism, fascism, imperialism, Toryism, Whiggism, federalism* / *Euphuism, Petrarquism, realism, naturalism, surrealism, symbolism, dadaism, impressionism, expressionism, classicism, romanticism* etc.

4. 51. 2. The sf may be tacked on to any other word signifying a real or pseudo-principle, a slogan or the like, as in *fanaticism, absenteeism, egotism, mannerism, colonialism, babyism, blackguardism, blockheadism, busybodyism, defeatism, favouritism, gangsterism, jingoism, hoodlumism, idiotism, know-nothingism, scoundrelism, toadyism* etc. All these words have a disparaging character, denoting such undesirable things as appear in the form of a regular system, a typical behavior or undesirable practice. The sf is never used to form words denoting something praiseworthy or even neutral. *Heroism* and *patriotism* are loans from French. For recent coinages see ASp 32. 292—296, 1957. Of general interest is W. Rüegg, Cicero und der Humanismus. Zürich 1946 (pp. 1 ff. on *-ism*).

4. 51. 3. In medical use, which is international, *-ism* conveys the meaning 'abnormal condition', as in a l c o h o l i s m, *cocainism, anomalism, deaf-mutism*.

4. 51. 4. There is also a group of words meaning 'idiom, peculiarity of speech' which existed already in Old Greek and passed into Latin and hence into the various European languages. Instances are A m e r i c a n i s m, *archaism* (= OGr), *Anglicism, Briticism, Iricism, Scotticism, Italicism, Hibernicism, Atticism* (= OGr), *Irishism, vulgarism, provincialism, solecism* (= OGr), *colloquialism, foreignism, modernism, newspaperism* a.o., denoting a peculiarity of style when tacked on to the name of a writer, as in *Carlylism, Gibbonism, De Quinceyism*.

4. 51. 5. *Criticism* 1607, orig. in senses 'fault-finding, critical remark', is derived fr. obs. adj *critic* 'fault-finding, censorious' just like the more modern *fanaticism* etc. (see above) on the basis 'state of being . . .'. The original implication of 'unfavorable judgement' continued, but a neutral sense also developed. After *criticism* 'critical remark' Dryden coined *witticism* 'witty remark' 1677. *Truism* 1708 is another word of this sense group which joins the preceding group on the basis of 'particular instance of . . .'.

4. 51. 6. The sf is ultimately OGr *-ismós* (sometimes *-isma*), by origin a sf with deverbal impersonal sbs (*rheumatismós* 'flowing' (of humors), as name of a disease, f. *rheumatízomai, baptismós* or *báptisma* f. *baptizo* 'dip in'). It is not, however, with this function that the sf has become productive in English or the various other European languages. The word *christianismós* in ecclesiastical Greek was by origin a deverbal derivative from *christianízō* 'profess christianity', but could also be connected with *christianós* 'christian'. The word passed into ecclesiastical Latin as *christianismus* which was analysed as derived from *christianus*. Signifying 'practice, religious system of the christians' it attracted *paganismus* (744 in Du Cange) der. fr. *paganus*. The age of the Reformation brings the words *Calvinismus* and *Lutheranismus*. The 16th c. marks the real rise of *-ismus* words, and from that time onwards we find corresponding coinages in English and French. With the progress of science and learning the sf grows considerably and is now the common property of the languages of all those nations which have directly or indirectly undergone the influence of Greco-Latin civilization.

4. 51. 7. Today there exists a derivational connection between words in
-ism and words in -ist and adjs from both are derived in -istic. Historically
speaking, the adjs are derived from words in *-ist* which are much older, but
they were subsequently used in connection with the *-ism* words, too (cf. also
4. 43. 5 for the alternations *-ic/-ism, -ic/-icism*).

4. 51. 8. Coinages are made from proper names, common sbs, and adjs. With
derivatives from proper names, *-ism* is tacked either on to the name (thus
implying descendance from the founder of the respective system, as in *Pla-
tonism, Aristotelism, Thomism, Spinozism, Machiavellism, Marxism* etc.) or
on to the adj derived from the name (i.e. the adj used as primary, connecting
the *-ism* with the followers of the founder, as in *Cartesianism, Hegelianism,
Leibnitzianism, Baconianism, Mohammedanism, Wesleyanism*; we sometimes
have doublets, as *Kantism/Kantianism, Lutherism/Lutheranism*). When the
derivative joins the group 'idiom' the coinage is made from the name.
    Words of the group 'idiom, when denoting the idiom of a language, are
derived from the ethnic adj (used as primary, type *Attic-ism*), chiefly on a
NL basis: not *Englishism* for 'British idiom', but *Briticism*, not **Frenchism*,
but *Gallicism. Irishism* is used beside *Hibernicism. Iricism* 1743 was coined
on the analogy of other *-icism* words, esp. *Scotticism* 1717, and *-icism* was
extended to *Briticism* 1743, *Italicism* 1773. Non-ethnic derivatives in the
'idiom' group have also an adjectival basis (*modernism, vulgarism* etc.), with
the exception of derivatives from proper names of writers.
    In the 'slogan' group the sf is always tacked on to the sb.

4. 52. 1. **-ist** /ɪst/

    forms denominal personal sbs with the basic meaning 'one connected
with ...'. It is ultimately OGr *-istés*, a sf with agent nouns derived from
verbs in *-ízō*. Many words passed into Latin where they were adapted with the
termination *-ista*, as *grammatista, logista, lyrista, sophista* (CL). In ecclesias-
tical Latin we find such words as *agonista, baptista, canonista, catechista,
evangelista, exorcista, hymnista, psalmista, tocista* a.o., and in Medieval Latin
also words derived from Latin roots, as *legista, jurista* (after *canonista*), *copista*.
In Ecclesiastical Latin we also find words derived from proper names, as
Origenista, Platonista, Scotista, Thomista, denoting a follower of Origenes etc.,
and words derived from adjs used as primaries, as *realista, nominalista* (fr.
realia, nominalia 'that which is real resp. nominal'). The sf has spread to the
various European languages as a formative of denominal sbs, including
English where it has never had any derivational connection with verbs in
-ize (which is the OGr principle of derivation), so the indication of the OED
(s.v. *-ist* 1. and 2.) is misleading.

4. 52. 2. Loans from Latin or French are such words as *baptist, evangelist,
exorcist, psalmist* (ME), *latinist, humanist, canonist, papist, atheist* (16th c.,
French). From about 1600, the sf can be considered as an English formative,
in words such as *linguist* 1588, *tobacconist* 1599, *votarist* 1603, *non-conformist*
1619, *bigamist* 1631 and others (see below).

4. 52. 3. Many words belong to the field of science, denoting either a) the adherent of a theory or scientific principle or b) a person exercising a scientific profession, after the ML patterns indicated above. Exs are a) *atomist, mechanist, realist, nominalist, deist, equalist, anarchist,* (17th c.) etc. etc., in countless present-day words such as *humoralist, hedonist, vitalist, transcendentalist, euhemerist, animalist* etc. etc. / b) *anatomist, botanist, economist, dentist, hygienist, oculist, physicist, psychiatrist, technicist/americanist, anglicist, germanist, indianist, orientalist, phonetist, phoneticist* etc.

4. 52. 4. The principle advocated may be of a non-scientific kind, and *-ist* words then denote one who is addicted to something, a political party, an ideology or the like. Exs are *tobacconist,* orig. 'one addicted to tobacco' 1599, *militarist, monopolist* 1601, *egotist, pleasurist, perfectionist, escapist, careerist, defeatist, abortionist / collaborationist, annexationist, isolationist, extremist, alarmist, rightist, leftist, marxist, socialist, communist, nationalist, fascist, gaullist, falangist* etc.

Words in *-ist* denoting the upholder of a principle are usually matched by an abstract sb in *-ism* denoting the respective principle (see *-ism*).

4. 52. 5. On the analogy of such words as L *citharista, cymbalista, tympanista,* ML *chorista, organista, lutanista* have been formed such words as *flutist* 1603, *harpist* 1613, *rhapsodist* 1646, *psalmodist* 1652, *violinist* 1670, *violist* 1670. *Chorist* 1538, *citharist* 1596, *cymbalist* 1656, *lutanist* 1600, *choralist* 1841 are adaptations of Latin words. *Pianist* 1839 was taken from French. The frequent AE pronunciation [pi'ænɪst] shows the tendency to connect the word with *piano,* pron. [pi'æno]. On the other hand, *soloist* 1864, is derived from *solo.* All these words denote the performer of a musical art.

From the preceding group the sf was extended to literary and other artistic fields, partly under the influence of French. Exs are *humorist* 1599, *essayist* 1609 (both later adopted into French), *annalist, novelist, diurnalist, columnist, anecdotist, cartoonist, caricaturist, landscapist / billiardist, funambulist, pugilist, equilibrist, ventriloquist.*

4. 52. 6. There are several other words in which *-ist* implies the idea of special knowledge or special achievements, as *statist* 1584 'statesman' (perh. an italianism originally), *florist* 1623 'expert in the knowledge of flowers' etc., which attracted *gardenist* (Horace Walpole) and *orchardist* 1794, *ebonist* 'worker or dealer in ebony' 1706. From *query* was derived *querist* 1633, from *type* the word *typist* 1843, orig. 'printer'. The French loan *copist* 1682 was soon refashioned into *copyist* (after *copy*). In recent usage, the sf often loses its learned character. *Balloonist* 1828 was still coined as a learned word, but in *cyclist, motorist, autoist, stockist* 'tradesman who keeps goods in stock' (1923), the sf has lost its original character though "such uncouth examples as *swimmist, knittist, doggist, cigarist . . . hoofologist . . . tennist . . . chalkologist*" (MeAL[4] Spl. I. 363) may betray the desire for highsounding, 'learned' words.

4. 52. 7. Following the line traced by the ML patterns, English has coined words from proper names of persons, common sbs and adjs used as primaries. The basis of coining is NL with most words of the emphatically scientific

vocabulary, i.e. the sf is tacked on to the Latin stem. But a good number of words have been formed on a native basis, i.e. the sf is tacked on to the English word (with occasional elision of a final vowel, as in *ebonist* which is perh. only a rendering sf F *ébéniste* 1680, *querist*, or an inserted latinizing *n*, as in *tobacconist*). While the sf may be attached to proper names and common sbs in wfnb (*Annist, Bonapartist, Brownist, Darwinist* / *cartoonist, columnist, essayist, gardenist*), it is very seldom tacked on to native adjs used as primaries: *rightist, leftist* represent a weak type.

The stress of the *-ist* word (in wfnb) is on the same syllable as in the unsuffixed basis.

4. 52. 8. Words in *-ist* are derivationally connected with words in *-y*, *-ism*, and *-istic*.

Type **archaeology/archaeologist**. Exs are pairs in *-logy/-logist*, *-gamy/-gamist*, *-nomy/-nomist* (not *astronomer*), *alchemy/alchemist*, *anatomy/anatomist*, *botany/botanist*, *metallurgy/metallurgist*.

Type **atheism/atheist**. The alternation is between *-ism* words denoting a doctrine or system and *-ist* words denoting its adherent. A few exs are *idealism/idealist*, *materialism/materialist*, *hedonism/hedonist*, *realism/realist*, *nominalism/nominalist*, *deism/deist*, *spiritism/spiritist*.

Type **atheist/atheistic**. It is chiefly from words denoting the follower of a scientific doctrine or system that adjs in *-ic* are derived. Exs are *idealistic* and other *-ist* words of preceding group. Cp. also 4. 43. 5.

4. 52. 9. Derivatives from adjs in *-ic* involve the phonological alternation [ɪk/ɪsɪst], as in *attic/atticist*, *historic/historicist*, *public/publicist*, *technic/technicist*.

4. 53.   -ister /ɪstə(r)/

has not been very productive in English. In Old French occur such words as *alchemistre, batistre, choristre*, by-forms of words in *-iste*. The sf is prob. *-ist* plus the *-istre* we find in *ministre, maistre*. Several words of the group passed into Middle English, first with the spelling *-istre* which was later adjusted to *-ister*, i.e. the termination was apprehended as *-ist* plus *-er* (cp. similar refashionings in *practicioner, musicianer* etc., see *-er* sf). Exs are *legister, alchimister, palmister, divinister, chorister, sophister*. In ME a few words were coined with the sf, as *pardonister*.

Barrister, in form also *barrester* recorded 1545, contains either the sf *-ster* (q.v.) or *-ister*, perhaps after *legister* which was still in use in the 17th c. and *sophister*. *Sophister* and *chorister* are the only ME loans which are still alive.

4. 54. 1.   -ite /aɪt/

is a substantival sf (wfnb and wffb) denoting appurtenance. It is ultimately OGr *-ítēs* which was a formative chiefly on the types *Stageirítes* 'a man from Stágeira' and *haimat-ítēs* 'blood-stone'. Through the translation of the Septuagint many biblical names came to end in *-ites*. They passed into eccl. Latin as *Israelita, Moabita, Sodomita* etc. together with sbs derived from personal proper names which were coined in ecclesiastical Greek to designate the

follower of a sect, named after the founder, as *Iacobita, Nicolaita*, and derivatives from common sbs likewise denoting sectarians, as *monophysita*. It is esp. the type of words derived from proper names which became strong in ML and which has passed into the various European languages.

4. 54. 2.   In English we find loans since the ME period (13th c.), chiefly from the ecclesiastical sphere. Exs are *Adullamite, Canaanite, Jacobite, Israelite, Sodomite* (ME), *Euchite, Hieracite, Ismaelite, Maronite, Mennonite* (16th c.), *coenobite, stylite, Ebionite* (17th c.). As an English formative, *-ite* becomes productive chiefly in the 19th c., but a few words are already found in the 18th c. Derivatives are made from proper names of persons with the meaning 'follower, disciple of . . .', as B r y a n i t e, *Campbellite, Hicksite, Millerite* (members of sects), *Brontëite, Hugoite, Ruskinite, Shelleyite | Darwinite, Spencerite | Pittite, Peelite, Hitlerite, Stalinite, Wallaceite, Vansittartite*. *Pre-Raphaelite* belongs here, and semantically the word *Laborite*.

The OED says that the words 'have a tendency to be depreciatory, being mostly given by opponents, and seldom acknowledged by those to whom they are applied' (s.v. *-ite*). It is difficult to tell to what extent this is correct. It certainly does not apply to the 'sect' group, nor has *pre-Raphaelite* a contemptuous tinge. Recent words like *Stalinite, Laborite, Bevanite, Wagnerite*, do not usually imply depreciation either.

4. 54. 3.   The OGr type *Stageirites* was first revived in 19th c. English words such as *Durhamite* 'inhabitant of Durham', *Claphamite, Ludlowite, Sydneyite* 'now rare and somewhat contemptuous' (OED). In recent AE, *-ite* is, however, a vogue suffix, though it is termed 'hideous' by Mencken. There occur *Camdenite, Brooklinite, Englewoodite, Raleighite, Seattleite, Yonkersite* etc. (MeAL[4] 549 and Spl. I. 363). 'In that field, indeed, it seems to drive out all other suffixes' (Mencken).

4. 54. 4.   There are also other coinages with the meaning 'one belonging to a certain place or milieu', derived from common sbs or adjs, such as *cityite, suburbanite, socialite, social-registerite* (Th. Wolfe). Words denoting devotees of a sport or the like are *turfite, ruggerite, beachite*.

Arkite 1774 'belonging to Noah's ark' was coined as an adj, but has also been used as a sb. The word *hawcubite* 'ruffian (infesting the streets in London at the beginning of the 18th c.)' 1712 may be a word containing our sf. *Mammonite* 1712 belongs in the 'sect' group with meaning 'follower of (personified) mammon'. The preceding words are the earliest English derivatives I have come across.

4. 54. 5.   In scientific nomenclature, *-ite* serves various uses. In mineralogy it is the systematic ending of mineral species, suggested by OGr words such as *anthrakitēs, haimatitēs, ophitēs, selēnitēs* which passed into Latin and French. Loans are *marcasite* 1471 (ML *marcasita*), *basanite* 1794 (LL *basanites*), *ampelite* 1751 (L *ampelitis*), *chlorite* 1794 (either OGr *chloritis*, with the by-form *-itis* that formed some words in OGr, or simply an Ec with the sf). Towards the close of the 18th c. a great number of names of minerals begin to be coined (derivatives from personal names are esp. frequent). Exs are a b i c h i t e (*Dr.*

Abich), *acanthite* (OGr *ákantha*), *adamite*, *aegirite* (*Aegir*), *aeschynite* (OGr *aischynē*), *agaphite* 'kind of turquoise', *albertite*, *lunulite* (*lunula*), *magnesite*, *norite* (*Norway* plus *-ite*), etc. etc.

In palaeontology *-ite* forms names of fossil organisms, as in *ammonite*, *dendrite*, *cancerite*, *choanite*, *hippurite*, *ichthyolite*, *lignite*, *trilobite*.

In anatomy and zoology *-ite* forms words denoting parts of a body or organ, type *som-ite* 'segment of the body'. The type is originally French and was imitated in English after 1850. Exs are *cer-ite*, *pleur-ite*, *pod-ite*.

In organic chemistry *-ite* forms the names of various organic compounds, as in *dulc-ite*, *mann-ite* (f. *manna*), *pin-ite*. Frequent are names of explosives, as *cordite*, *dynamite*, *lyddite*, *panclastite*, *rifleite*, *tonite*. The sf is much used with commercial names of products, as *ebonite*, *bakelite*, *vulcanite*.

In inorganic chemistry *-ite* forms names of salts of acids, as in *nitrite* 'a salt of nitrous acid', *sulphite*. The sf here is not the provenance-denoting OGr *-itēs*, but the ablaut variant of *-ate* established by Guyton de Morveau and Lavoisier in 1787.

4. 54. 6.   Words in *-ite* passed into English from French where L *-ita* became *-ite*. Several 19th c. uses of the sf are also imitated from French, but the pronunciation of the sf is [aɪt] under the learned influence of OGr *-itēs*, L *-ita*. Cp. also the pronunciation [aɪtɪs] rendering OGr *-itis* and [aɪn] rendering L *-inus*. In derived adjs in *-itic* as *dynamitic*, *Moabitic*, *Islamitic* etc. the pronunciation is, however, [ɪtɪk] whereas derivatives with other morphemes retain the vowel of *-ite*: *dynamiter* / *Ismaelitish*, *Israelitish*, *Moabitish* etc.

4. 55. 1.   -ity /ɪtɪ/

forms abstract sbs from adjs with the meaning 'state, quality, condition of ...'. Coinages are originally and predominantly made on a Latin basis of coining which accounts for the rareness of derivatives from native roots, and for the stress on the antepenultimate. The oldest words are 14th and 15th c. loans from French, such as *ability*, *actuality*, *agility*, *bestiality*, *captivity*, *diversity*, *infirmity*, *impassibility*, *liberality*, *lubricity*, *singularity* a.o. The French words do not represent popular phonetic developments but are what are a little unfortunately termed 'mots savants', i.e. they are formed on a Latin basis of coining. F *rusticité* 1327, *lubricité* 14th c. are not derived from the adjs *rustique*, *lubrique* but represent L *rusticitas*, *lubricitas*.

French as the immediate source of the preceding English words accounts for the spelling *-ite*, *-itee* in Middle English which became *-ity* in MoE. A few words were borrowed from French as formations containing the variant *-te* (see below): *chastete* 1225 (= OF *chastete*), *scarcete* 13.. (f. ONF *escarcete*), *curiouste* 1380 (= OF *curioste*), *falste* 1330 (= OF *falsete*). In the 16th c. they were latinizingly refashioned into *chastity*, *scarcity*, *curiosity*, *falsity*.

4. 55. 2.   The English sb was not originally formed from the English adjective, but is either a separate loan or a word coined as the actual or potential Latin sb in *-itas*. *Sincerity* 1546 (with [ɛ]) has, from the point of view of coining, nothing whatsoever to do with *sincere* 1533 (with [i]), nor has *chastity* 1225 (with [æ]) with *chaste* 1225 (with [e]) or *nobility* 1398 with *noble* 1225. Historical-

ly speaking, adjs and sbs are separate loans. This is even clearer if we compare *superfluity* ME with *superfluous* ME, *atrocity* 1534 with *atrocious* 1669, *assiduity* 1605 with *assiduous* 1538, *hilarity* 1500 with *hilarious* 1823, *simplicity* 1374 with *simple* 1220. *Duplicity, felicity, fidelity* are not matched by any adj, *sensuality* 1340 is older than *sensual* 1450. But synchronically speaking, *-able/-ability, -ible/-ibility, -ic/-icity* have a direct derivational connection. With *-able/-ability (-ible/-ibility)*, the synchronic relevancy of the pattern has gone far beyond its original morphological basis. While other adjs derive sbs in *-ity* only when the adj is Latin coined (*rascality* f. *rascal* = OF *rascaille* is exceptional), the derivative range of *-able/-ability* (the graphic variant *-ible/-ibility* has only weakly developed) today comprises practically any adj in *-able*, including adjs derived from native roots (*lovable/lovability*).

4.55.3.   The alternation *-able/-ability* which originated in borrowed Latin word pairs such as *implacable* 1522/*implacability* 1531, *impeccable* 1531/*impeccability* 1613, obs. *amable* 1430—1677/*amability* 1604 subsequently gave rise to such sbs as *capability* 1587, *inflammability* 1646, *excitability* 1788, *agreeability* 1778, *respectability* 1785, *accountability* 1794, *liability* 1794, *adaptability, alterability, amenability, amiability, attainability, comparability, impeachability, presentability* (19th c.). No *-ability* words appear to exist for *appealable, attackable, commendable, consumable, countable, decayable*.
Examples of derivation on the pattern *-ible/-ibility* are *visibility* 1581 (cf. LL *visibilitas*), *infallibility* 1611 (cf. ML *infallibilitas*), *compatibility* 1611, *feasibility* 1624, *invincibility* 1677, *responsibility* 1787.
Derivatives from adjs with a native basis are *saleability* 1797, *lovability* 1834, *unsaleability* 1871, *readability* 1860, *unreadability* 1871, *believability* 1865, *unbelievability* 1851, *workability* 1874, *unworkability* 1881. In AE the type seems to be more productive. Mencken (AL[4], Spl. I. 366) quotes such words as *buyability, cleanability, clubability, getability, grindability*.

4.55.4.   The derivative force of *-ability* is today practically restricted to the formation of sbs from deverbal adjs with a passive meaning. For others the corresponding sb is in *-ableness*. This accounts for *charitableness (un-)*, *comfortableness (un-)*, *conscionableness (un-)*, *favorableness (un-)*, *seasonableness (un-)*, *peaceableness (un-*; the OED quotes a short-lived *peacability* 1382—1440, as rendering an OF word), *serviceableness, treasonableness, treasurableness, valuableness* without any competing sb in *-ability*. In other cases, the word in *-ableness* is the regular one while the sb in *-ability* is rare or less common: *agreeableness, creditableness, fashionableness, honorableness, profitableness, proportionableness, preferableness*. The following pairs seem to be equally common: *amiableness/amiability, amicableness/amicability, suitableness/suitability*. The only example I can think of to show the reverse is *reputability* which (acc. to OED) is more frequent than *reputableness*.
The derivative in *-ness* is usually older while *-ability* words are much more recent. This is especially so with sbs of the t. *unaccountability* which are chiefly 19th c. or later. A few exs are *unaccountableness* 1676 (*-ity* 1704), *unalterableness* 1620 (*-ity* 1847), *unanswerableness* 1625 (*-ity* 1849), *unapproachableness* 1727 (*-ity* 1846), *unassailableness* 1870 (*-ity* recent, no qu. in OED), *unattainableness* 1690 (*-ity* 1850), *unavailableness* 1548 (*-ity* recent, no ex in

OED), *unavoidableness* 1599 (*-ity* recent, no qu. in OED), *unchangeableness* 1548 (*-ity* 1813, once 1400), *uncompliable* 1687 (*-ity* 1880), *unconformableness* 1711 (*-ity* 1833).

4. 55. 5. -icity/-ic: lubricity 1491 (= F, LL) conn. with *lubric* 1490, *rusticity* 1531 (= F, L), connected with *rustic* 1440, attracted such words as *eccentricity* 1551, *electricity* 1646, *authenticity* 1657 (the corresponding French words are all much younger), *elasticity* 1664, *domesticity* 1721, *publicity* 1791, *apostolicity, atomicity, catholicity, historicity* (19th c.).

-ality/-al: actuality 1398 (= ML; F *actualité* is rec. from the 14th c.; to be corrected in OED s.v. *actuality*), connected with *actual* 1315, *bestiality* 1374 (= F), connected with *bestial* 1393, *liberality* 13.. (= F, L), conn. with *liberal* 1387, attracted *virtuality* 1483 (no pattern in F or L recorded), *fatality* 1490 (F, L) conn. with *fatal* 1374, *brutality* 1549, *vocality* 1597, *superficiality* 1530, *reality* 1550, *rascality* 1577, *causality* 1603, *joviality* 1626, *literality* 1643, *banality, technicality* (19th c.) etc. etc.

-arity / -ar: singularity 1340 (F, L), conn. with *singular* 1340, followed by *regularity* 1603 f. *regular* 1387, *peculiarity* 1610, *similarity* 1664, *spectaculari-ty* 1883 etc.

Other types: *salinity* 1658, *torpidity* 1614, *intrepidity* 1704, *trepidity* 1721, *abnormity* 1731, *activity* 1530, *levity* 1564, *egoity* 1651, *femineity* 1820, *inferiority* 1599, *convexity* 1600, *ubiquity* 1546 and many others, all coined on a Latin basis. A recent Americanism is *Americanity* 'the genuine American spirit'.

4. 55. 6. There are a few *-ity* derivatives from native adjs, as *oddity* 1711, *queerity* 1713, *betweenity* 1760. Playful or vulgar are such words as *coxcombity, threadbarity, fairity, womanity* (after *humanity*), see OED s.v. *-ity*. *Scantity* 1398 (rare) is prob. *scant* 'scarcity' 1350 plus *quantity*.

The stress is on the antepenultimate.

4. 55. 7. As in Latin there are no *-itas* derivatives from ptcs, we can form no *-ity* variants of *absoluteness, completeness, requisiteness* whereas we often have *-ness* and *-ity* derivatives from one and the same adj of Latin origin.

The suffix is generally quoted as *-ty* (OED, Je, Ko etc.), but I very much doubt whether *-ty* has ever been felt to be a formative, except for the extension *-alty* (see below). Otherwise *-ty* is a termination in loans, which often look like English coinings: *sovereignty, frailty, naivety, nicety, certainty, surety, safety* represent OF *souverainete, frailete, naivete, nicete, certainte, surte, sauvete*. The only form in which *-ty* acquired restricted independence is the extension *-alty* which represents OF *-alte*, from L *-alitatem*. AF legal terms are *severalty* 1449 'separateness', *personalty* 1481 'personal goods or property', *temporalty* 1377 'the laity' etc., *spiritualty* 'clergy' etc. c 1400 H, *commonalty* 'the common people, the commons' 1290, *mayoralty* 1386 (= OF *mairalte*) 'the office of a mayor'. After the last of these *shrievalty* 1502 was coined (*shrieve* is an older variant of *sheriff*) as well as *sheriffalty*, later followed by *squirealty* 1856. On *personalty* are fashioned *nationalty* 'national property' 1812, and *realty* in the now current sense 'real estate'.

Specialty, loyalty, royalty repr. OF *specialte, loialte, roialte* (the OF variants of L *-itatem* are pop. *-te* and *-ete* and Latinizing *-ite*). *Casualty* 1423 and *realty* 1440 seem to have followed the group, if we are to judge by the lack of recorded originals in Godefroy (OF *realte* is recorded, but with meaning 'fee, tax' only, whereas *realty* formerly had the meaning 'reality' also).

4. 56. 1.   -ive /ɪv/

is an adjectival sf with the meaning 'characterized by . . .' which English owes to Latin and French. The sf is ultimately L *-ivus*, a formative chiefly deriving adjs from the second participle of verbs, as *administrativus, admissivus, affirmativus, appellativus, captivus, collectivus, expectativus, inductivus, infectivus, nativus, passivus* etc. The sf has been productive in all stages of Latin and, in its respective forms, in the Romance languages. In Old French, the form of the sf was *-if* (fem. *-ive*). A number of words passed into Middle English (beginning with the 14th c.), such as *affirmative, expressive, native, negative, pensive, representative, successive*, first spelled and probably also pronounced *-if*. The change into *-ive* is partly due to the influence of Latin, partly a result of the place of the main stress (see Jesp. I. 6. 52). Though the first *-ive* words came into English through the medium of French, Latin influence has prevailed in that the basis of coining with English new-formations was originally Latin. Words were originally coined as deverbal adjs derived from second Latin ptcs (which were also often the derivational basis for English verbs, see *-ate* vb sf). The words may have an actual Latin pattern, but the existence of an original is practically irrelevant. Many adjs have a French counterpart as well. The basis of coining in French was the same, which may have helped in the extension of the pattern. Exs from the 16th c. are af-fec ti ve, *attractive, abusive, collective, cognitive, concoctive, conductive, persuasive, affective*, from the 17th c. *absorptive, accumulative, additive, allusive, appropriative, comprehensive, contradictive, convulsive, creative, eductive, effusive, excursive, inductive, productive, retrospective* etc., from the 18th c. *decorative, elusive, hesitative, admissive, suppressive, administrative*, from the 19th c. *aggressive, appreciative, competitive, contortive, confederative, adaptative, migrative* etc.

4. 56. 2.   From a structural point of view, most of the preceding Latin-coined words in *-ive* are matched by Latin-coined sbs in *-ion*. Thus the alternation is affective/affection, the adj having the meaning 'characteristic of, pertaining to what is denoted by the other member'. The phonological changes of consonant involved are [tɪv/šən] (with adjs in *-tive*), [sɪv/šən] (after *n, l* or short vowel plus *-sive*), [sɪv/žən] (after long vowel or diphthong plus *-sive*) ([ɜtɪv] alternates both with [ɜ(r)žən] and [ɜ(r)šən]). Sometimes stress change is involved, as with *exécutive/execútion, -itive* words, such as *ádditive/addítion, cógnitive/cognítion*, most *-ative* words, such as *migrative/migrátion, accúmulative/accumulátion* etc.

A more detailed illustration is the following: 1) the opposition [sɪv/šən] is observed with pairs in *-essive/-ession* (*aggressive/aggression, possessive/possession* etc.), *-ensive/-ension* (*extensive/extension, comprehensive/comprehension* etc.), *-ansive/-ansion* (*expansive/expansion* etc.), *-ulsive/-ulsion* (*convulsive/*

convulsion, impulsive/impulsion etc.), *-issive/-ission (permissive/permission, omissive/omission* etc.); 2) the opposition [sɪv/žən] we have with pairs in *-asive/-asion (evasive/evasion, abrasive/abrasion), -osive/-osion (explosive/explosion, corrosive/corrosion), -usive/-usion (conclusive/conclusion, illusive/illusion), -isive/-ision* [aɪsɪv/ɪžən] *(decisive/decision, incisive/incision)*; 3) the opposition with word pairs in *-ersive/-ersion, -ursive/-ursion* may follow either 1) or 2): [ɜ(r)sɪv/ɜ(r)žən] or [ɜ(r)šən] *(subversive/subversion, abstersive/abstersion, excursive/excursion)*; 4) the opposition [tɪv/šən] occurs with anglicized pairs in *-ative/-ation* [etɪv] or [ətɪv/ešən] *(decorative/decoration* etc.), *-etive/-etion (completive/completion* etc.), *-itive/-tion (auditive/audition* etc.), *-utive/-ution (constitutive/constitution* etc.), *-otive/-otion (motive/motion* etc.), *-active/-action, -ective/-ection, -ictive/-iction, -uctive/-uction (attractive/attraction, collective/collection, afflictive/affliction, constructive/construction), -eptive/-eption, -iptive/-iption, -optive/option (conceptive/conception, descriptive/description, adoptive/adoption), -entive/-ention (attentive/attention), -inctive/-inction, -unctive/-unction (distinctive/distinction, subjunctive/subjunction), -umptive/umption (consumptive/consumption)*; 5) the opposition [tɪv/tšən] is found with such pairs as *digestive/digestion, suggestive/suggestion)*.

4.56.3.   Words which were originally loans or Latin-coined could be analysed as derived from English vbs in *-s* or *-t*. In this way we get a new pattern of derivation on a native basis of coining producing such derivatives (chiefly from endstressed vbs, *cómbat* is derived from *combat* sb) as s p o r t i v e 1590, *coercive* 1600, *persistive* 1606, *conducive* 1646, *humective* 1633 (from the now rare vb *humect*), *amusive* 1728, *adaptive* 1824, *adoptive* 1834 H, *denotive* 1834. Other exs are *combative, concretive, constrictive, constructive*. *Secretive* is first recorded 1815, indirectly through *secretiveness* 'propensity to conceal', as defined in a quotation from a treatise on physiognomy; i.e. the adj is derived from the vb *secrete* 'conceal'. The common pronunciation I have heard in the States, is ['sikrɪtɪv], as in *a secretive person*, though Kenyon-Knott do not list it. They give only [sɪ'kritɪv] which is the normal pronunciation for the biological term (as *secretive glands*). A secretive person is a person who keeps things *sécret*, but a gland *secrétes*. (The explanation of the OED s.v. *secretiveness* is misleading. That *secretiveness* is quoted earlier than *secretive* 1830 is incidental to the derivational process. If *secretiveness* were merely formed after F *secrétivité*, a word like **secretivity* would have been the most likely adaptation.). *Crescive* 1566 has no French or Latin original and does not fit the discussed patterns. It is perh. formed from *crescent* with substitution of the 'sf' (cp. *quer-ist* 1633 f. *quer-ent* 1598) or derived from the present stem of the L verb *crescere*, in imitation of the weak pattern *cadiv-us, noc-ivus, opt-ivus*.

4.56.4.   Latin-coined words in *-ative* could often be analysed as representing an English vb plus *-ative* /ətɪv/. This leads to the PE type a s s o r t / a s s o r t a t i v e . Exs are *calmative, causative, commutative, confirmative, affirmative, confutative, connotative, conservative, continuative, denotative, disputative, excitative, exhortative, expectative, exploitative, fermentative* etc.

4.56.5.   The word t a l k a t i v e (beg. 15th c.) is difficult to account for. It is probably originally a facetious word, perh. mock-Latin of the well-known

macaronic kind. The formal basis was given by the numerous words in -ative
resp. -ativus in Latin. The word has given rise to several facetious coinages
such as babblative 1583, writative (Pope), speakative, unwalkative (q. Jesp.
VI. 25. 24).

In American English we find derivatives also from everyday words and
word groups, as costive 'costly' 1848 DA and afterthoughtive (heard in con-
versation). The suffix is more frequent in combination with -ness. Very common
is stick-to-itiveness 1867 (OED Spl. s.v. stick 35). There is also the word hang-
to-itiveness 1879 DA. The force of the sf probably lies in the extension / ɪtɪ, ətɪ/
which has produced a few AE words of the talkative type: stay-at-homeativeness
1831 DA, wide-awakeativeness 1845 DA, go-aheadativeness 1846 DA.

4. 56. 6.   English formations in -ive are almost all deverbal, in contradistinc-
tion to Latin and French derivatives which are in part denominal (tempestivus,
arbustivus, aestivus, festivus / craintif, maladif, fautif, hâtif). Opinionative 1547
is either a blend of the obsolete words opinionate 1553 (formed like passionate
1450) and opinative 1530 (= L opinativus) or, as the OED supposes, extended
from opiniative (= obs. F opiniatif), recorded 1574, after opinion. Authori-
tative 1605 f. authority is coined after quantitative 1581 and qualitative
1607 (repr. quantitativus ML and qualitativus LL f. quantitas resp. qualitas). The
Latin word potestativus (not recorded in its anglicized form before 1630) may
have favored the coining of authoritative semantically. Argumentative 1642
(perh. repr. F argumentatif) is semantically related to authoritative. Facultative
1820 is either another Ec in the group of -ty words or F facultatif. The sf in
this group as well as in talkative has the form -ative.

4. 56. 7.   Adjs derived on a native basis or such as may be analysed as coined
from an English stem, have the stress on the same syllable as have the un-
suffixed words. Exceptions are adjunctive, instinctive and argumentative. Un-
connected words are stressed on the third from the end (words of two syllables
on the first syllable).

As the chief derivational English pattern is that based on a Latin participial
stem, and as Latin ptc stems end either in -t or in -s, -ive was naturally tacked
on to a stem ending in -s or -t only. The phonological pattern has, however,
also been observed with the other types discussed.

4. 57. 1.   -ize /aɪz/[1]

is ultimately OGr -izō, a sf with both transitive and intransitive verbs, as in
OGr kaumatizō 'subject to heat (kauma)' and 'be subjected to heat, suffer
from heat', hellēnizō 'make Greek, hellenize' and 'act as a Greek, speak Greek'.
But other verbs had either one or the other sense, the group of transitive
verbs being the stronger one. A good many words passed from Ecclesiastical
Greek into Latin where, by the fourth century, they had become latinized as
verbs in -izare: agonizare, anathematizare, baptizare, barbarizare, catechizare,

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[1] Alois Pfalzer, Zur Geschichte von englisch -ize. Gebrauch und Vorkommen der
Endung im englischen Schrifttum von der Renaissance bis zum 18. Jahrhundert.
Mainz dissertation 1953. — See also ASp 22 (1947) 71—72 some neologisms in
'-ize', by M. B. Emeneau.

christianizare etc. Verbs with a Latin stem were also formed, as *moralizare*, *pulverizare*, a derivational type which in Medieval Latin produced such words as *auctorizare, temporizare*. In Old French we find many verbs, belonging chiefly to the ecclesiastical sphere, as *baptiser* (11th c.), *martyriser, scandaliser* (12th c.), *canoniser, évangéliser* (13th c.), *anathématiser, catéchiser, cicatriser, exorciser, moraliser, poétiser, pulvériser* (14th c.). The time of greatest productivity for Latin and the languages influenced by Latin came with the Renaissance.

4. 57. 2.   The first words we find in English are loans with both a French and a Latin pattern, as *baptize* 1297, *au(c)torize, canonize, evangelize, sabbatize, solemnize* (all in Wycliffe), *catechize, harmonize, martyrize, moralize, organize, scandalize, syllogize, tyrannize* (15th c.). Early 16th century words may still be considered loans, as *naturalize, poetize* (from French), *psalmodize* (= ML *psalmodizare*). Toward the end of the 16th century, however, we come across many new formations in English, such as *bastardize, epitomize, equalize, gentilize, pilgrimize, popularize, spiritualize, villainize, womanize*. The formal and semantic patterns were those underlying the analyzable loans from Latin and French, but owing to the renewed study of Greek, the educated had in general grown more familiar with its vocabulary and used the patterns of Old Greek word-formation freely. *Platonize* 'philosophize after the manner of Plato' conformed to a Greek original which could be imitated in words like *Petrarchize* 'imitate Petrarch's style', *Martinize* 'discourse in the strain of Martin Marprelate', *Epicurize* and others. As OGr *hellēnizō* meant 'turn into Greek', *Germanize* 'turn into German' was formed while *Latinize* had already a Late Latin pattern *latinizare*. Intransitive verbs after OGr *hellēnizō* 'act as a Greek', *barbarizō* 'act as a barbarian' were frequent between 1580 and 1700 while they form a minor type in PE. Examples are *gentilize, monarchize, paganize, popularize, soldierize*.

Though English adopted many Old Greek words, it basically introduced derivative patterns. We therefore find that English derivatives in *-ize* often have quite different Greek equivalents, as a comparison between OGr *hypnoō, kauteriazō, monopōleō, narkoō, organoō, philosopheō, phlebotomeō, sympatheō, tragōdeō* with their English counterparts shows.

4. 57. 3.   We find many new formations between 1580 and 1700. The verbs belong to the terminology of literature, medicine, natural science, and theology. The great share of Puritanism is instanced by such words as *adulterize, heathenize, paganize, popize, puritanize, rabbinize* / *Arianize, Babelize, Calvinize, Israelize*, most of which are obsolete today. Of the many verbs coined between 1580 and 1700 the following are in common use today: *apologize, civilize, criticize, dogmatize, equalize, fertilize, formalize, humanize, Italianize, jeopardize, methodize, monopolize, naturalize, paganize, patronize, philosophize, Romanize, satirize, secularize, signalize, specialize, spiritualize, sterilize, symbolize, tranquilize*.

4. 57. 4.   Comparatively fewer words were formed in the 18th century. Examples are *anglicize, apostrophize, attitudinize, brutalize, circularize, dramatize, elegize, gallicize, generalize, idealize, legalize, legitimatize, liberalize, magnetize, materialize, modernize, neutralize, personalize, plagiarize, politicize, scrutinize, systematize*.

4. 57. 5. The growth of science characterizes the vocabulary of the 19th century in general. To it we owe large numbers of -ize verbs which it cannot be our task to list here. Our own technological century has added countless other words of which many have passed into general use, as even the layman now lives in a more or less technical world. A few of the 19th century words that have gained wider currency are *acclimatize, actualize, bowdlerize, burglarize, canalize, capitalize, carbonize, centralize, colonialize, commercialize, demilitarize, deodorize, emphasize, focalize, immunize, industrialize, macadamize, militarize, mobilize, nationalize, polarize, propagandize, rationalize, serialize, socialize, stabilize, standardize, summarize, terrorize, visualize.* The 20th century has coined such words as *hospitalize* 1901, *radiumize* 1914, *motorize* 1918, *Sovietize* 1919, *robotize* 1927, *publicize* 1928, *Sanforize* 1948, *dieselize* 1948 (Reifer), and more recent *nuclearize, denuclearize, de-Stalinize, communize, civilianize* (Reifer), *weatherize* (Reifer).

4. 57. 6. In all the stages of its history, derivation by -ize has worked chiefly on a Neo-Latin basis (cf. 4. 1. 13). Formations from other than Greek or Latin stems have never been numerous. Most of them are not in common use, either. The phonetic shape of such derivatives, moreover, was often similar to that of Latin-coined words, as in *foreignize* 1661, *villainize* 1599 (for a long time both spelled *-anize*), *womanize* 1593, *heathenize* 1681, *lionize* 1809, *workmanize* 1930. Recorded also, though not current, are *Englishize* 1858, *nakedize* 1858, *peasantize* 1904, *gospelize* 1643. In recent technical jargon, however, the barrier seems to have been overcome, hence such words as *winterize, weatherize* (a car), *tenderize* (as meat; the verb is first recorded 1733, but termed 'rare' in OED), *standardize* 1873. Cf. also derivation from modern personal names which became common about 1800.

4. 57. 7. Basically, we have the same derivative types in English that existed in Old Greek and Late Latin. Verbs are derived from substantives, adjectives, and proper names of persons. The semantic patterns also are similar. Modern usage has added derivatives from proper names of persons as transitive verbs (Old Greek had only intransitive verbs here) and derivatives from names of chemical substances.

Deadjectival verbs (almost exclusively belonging to sense group *legalize*, see below 4. 57. 8) represent the strongest type. Examples are *actualize, ethicize, fertilize, fossilize, legalize, legitimatize, nationalize, neutralize, objectivize, regularize, secularize, spiritualize, sterilize.* Derivatives from ethnic adjs are *americanize, anglicize, gallicize, latinize.* Cp. also such words as *europeanize, sovietize, westernize.*

Desubstantival verbs are *alchemize, capitalize, crystallize, epitomize, fictionize, itemize, jeopardize, lionize, memorize, ozonize, scrutinize, sectionize, terrorize, victimize.*

For derivatives from proper names and names of chemical substances see below 4. 57. 8 the types *winterize* and *alcoholize.*

4. 57. 8. The principal semantic types with transitive verbs are the following:

1) l e g a l i z e 'render, make . . .' (the regular type with deadjectival verbs; the strongest pattern; for examples see above 4. 57. 7;

2) itemize 'convert into, put into the form of, give the character or shape of . . .' as in *dramatize, fictionize, satirize | methodize, monopolize, systematize | motorize, dieselize | unitize, robotize*;

3) propagandize 'subject to the action, treatment, or process of . . .', as in *hospitalize, radiumize, scrutinize, terrorize*;

4) winterize 'subject to a special (technical) process connected with . . .', as in *weatherize*, also in derivatives from proper names of persons: *simonize, sanforize, galvanize, grangerize, macadamize, bowdlerize, de-Stalinize*;

5) alcoholize 'impregnate, treat, combine with . . .', used in derivatives from names of chemical substances, as *alkalize, carbonize, etherize, hydrogenize, ionize, oxidize*.

The group of intransitive verbs is much smaller. The meaning usually conveyed is 'do as, act in a way characterized by . . .', as in *astronomize, botanize, geologize, theorize, dogmatize | burglarize, deputize, patronize, philosophize*. Derivatives from adjectives are possible, but not very common. Examples are *americanize, classicize, generalize, medievialize, moralize, tranquillize*. In derivatives from personal names the implication is 'imitate the manner or style of . . .', usually with a slightly depreciative tinge. Examples are *Barnumize, Calvinize, Petrarchize, Pindarize, Platonize*.

4. 57. 9.   The productivity of -*ize* is tied up with certain phonetic shapes. The bulk of verbs end in [laɪz], [raɪz], and [naɪz] (many of them deadjectival verbs in -*alize*, -*arize*, -*anize*). Next come verbs in [saɪz] (largely through verbs in -*icize*). Smallest in number are the verbs ending in [taɪz, daɪz, maɪz] instanced by such verbs as *dogmatize, dramatize, hypnotize, legitimatize, robotize, systematize, unitize | bastardize, jeopardize, methodize, oxidize, propagandize, standardize, subsidize | atomize, Barnumize, economize, epitomize, itemize, Macadamize, victimize*. There a few verbs in [dʒaɪz], derived from OGr substantives in -*gia*, as *apologize, elegize, eulogize, geologize*. Other phonetic types are practically negligible.

4. 57. 10.   Almost all deadjectival verbs and many verbs derived from substantives ending in a consonant are also analyzable as direct formations on an English basis. For derivatives from adjectives in -*ic* the alternation is -*ic*/-*icize* /ɪk-ɪsaɪz/ (cf. the alternations -*ic*/-*icity*, -*ic*/-*icism*), as in *classic/classicize, romantic/romanticize, poetic/poeticize, domestic/domesticize, ethic/ethicize, historic/ historicize, public/publicize*. The alternation -*ic*/-*ize*, as in *aromatic/aromatize, dogmatic/dogmatize, dramatic/dramatize, hypnotic/hypnotize, magnetic/magnetize, satiric/satirize, systematic/systematize* is problematic. Apart from a few pairs, the semantic analysis does not conform to the regular pattern we find with deadjectival verbs. *Dogmatize, hypnotize, magnetize, satirize* do not mean 'render dogmatic etc.', though we might somewhat forcedly interpret them as intransitive verbs used transitively (*dogmatize* 'be dogmatic (with regard to something)'). Historically, they are probably adaptations of F *dogmatiser, hypnotiser, magnétiser, satiriser*. It is therefore difficult to assign derivative relevancy to the heterogeneous -*ic*/-*ize* pattern.

4. 57. 11.   Derivation from substantives ending in *-y* implies the alternation /ı—aız/: *alchemy/alchemize, astronomy/astronomize, economy/economize, theory/theorize* (*-y* = OGr *-ia*), *colony/colonize* (*-y* = L *-ia*), *subsidy/subsidize, scrutiny/scrutinize* (*-y* = L *-ium*). Elision of other vowels we have in *alkali/alkalize, jubilee/jubilize, propaganda/propagandize.*

4. 57. 12.   Derivatives from or connected with an English word are usually stressed like the latter: *cápital/cápitalize, mónophthong/mónophthongize, óxygen/óxygenize, ózone/ózonize, pálatal/pálatalize, propagánda/propagándize, spíritual/spíritualize.* Homological stress is also found in *sýstematize* (after *sýstem*). Words formed on a Neo-Latin morphological basis are usually stressed on the antepenultimate (*hýpnotize, nárcotize*). For the whole stress history see Danielsson 192—216.

4. 58. 1.   **-kin, -ikin** /kın, ıkın/

is a sf with diminutive or endearing force, today used only as a jocular formative with a depreciative tinge. It represents Middle Dutch *-kin*, Middle Low German *-kin*, found in words which passed into English through contact with Flanders and the Low German countries.

4. 58. 2.   Proper names of persons occur as early as the 13th c. in English: *Willekin* (William), *Tomkin* (Thomas), *Timkin* (Timothy), *Perkin* (Peter), *Dawkin* (David), *Janekin* (John), *Malekin* (Mathilde), *Hawkin* (Henry), *Simkin* (Simon) a.o. "As Christian names these seem to have mostly gone out of fashion shortly after 1400" (OED s.v. *-kin*), but we find them (often in form *-kins* or *-kinson*) as surnames: *Atkins, Dawkins, Dakin, Dickens, Jenkins, Perkins, Watkins, Wilkinson* etc. Though the preceding names were originally borrowings from Dutch, they were partly analysable as English words, e.g. *Tom-kin, Wil-kin, Tim-kin.* This may have helped in the formation of 14th c. words such as *fauntekin* (f. *faunt* 'infant'), *maidenkin, fiendekin* which have not, however, survived. More recent coinings are *napkin* 1420 (app. fr. obs. *nape* = F *nappe* 'table cloth'), *cannikin* 1570 'small can or drinking vessel', in the 19th c. followed by *pannikin* (1823), *manikin* 1570 (need not be considered as a loan from Dutch (OED)), obs. *rutterkin* 1520 (f. *rutter* 'cavalry soldier') 'swaggering gallant or bully', obs. *bulkin* 1583 'bull-calf' (also used as a term of endearment), Sc *thumbikins* or *thumbkins* 'thumb screws' 1684, *ciderkin* 'kind of weak cider' 1676, *bootikin* 1727, orig. 'instrument of torture' (cp. *thumbkins*), *joskin* 'bumpkin' 1798 (if fr. dial. *joss* 'bump', influenced by *bumpkin* 1570 whose etymology is not clear). Thackeray uses such words as *essaykin, grudgekin, lordkin,* as others have occasionally used *boykin, devilkin, godkin, catkin, capkin, wolfkin, ladykin,* none of them in current use. But as the above words show, it is not quite correct to say that "the only example which has obtained real currency is *lambkin* (1579)" (OED s.v. *-kin*). *Limpkin* 1871 DA is the common name of the courlan of Florida, Central America and the West Indies. The bird is so called from its limping gait.

4. 58. 3.   It is perh. on the analogy of surnames in *-kins* that in slang one finds such words as *babykins, boykins, sonnikins, Janeykins* (f. *Jane*), chiefly

in addressing a person. *Spillikins* 1734, a name for a game with slips of wood may be from *spill* 'slip of wood' etc.

The sf occurs in swear words, such as *God's bodikins* 1598, *lakin* (prob. f. (*our*) *lady*), *pittikin* (fr. *pity*).

4. 58. 4.   Loans from Dutch are *catkin* (plant), *dodkin* (a coin), *firkin, kilderkin* (measures) a.o. Other words are of uncertain etymology, as *barmkin* 'turret' (northern dial.), *bumpkin* 'lout', *gaskin* 'hose', *gherkin* (= G *gurke*), *griskin* 'lean part of the loin of a bacon pig', *grimalkin* 'old cat or woman', *latterkin* 'glazier's tool', *nipperkin* (a measure), *pipkin* 'a small pot', *rumkin* 'a drinking vessel', *slammakin* 'slattern', *sooterkin* 'sweetheart'. *Pumpkin, punkin* 1647 is refashioned from *pompion, pumpion* 1545 (= obs. F *pompon* 'pumpkin'), cp. also the spelling *tampkin, tamkin* for *tampion* = F *tampon*.

4. 59. 1.   -le /l/ (type sparkle)

is similar to *-er* (as in *clatter* 4. 29) and is found with the same class of disyllabic verbs, namely such as express sound or movement. Verbs in *-le* denote (usually quick, rapid, nimble) repetition of short, small movements, often with the shade of jerkiness. There is a smaller group of sound verbs expressive of a series of little or unimportant sounds. The productive force of *-le* lies in the symbolically expressive value of the sound [l] (see also 7. 35 and cp. L *-iculare*, F *-ailler, -iller, -ouiller* where the *l* was formerly pronounced [l], G vbs in *-eln*, as *lächeln, fächeln, zischeln* etc.). It would be erroneous to look for any concrete source of derivation (Koziol thinks of the vbs as having sprung from diminutive sbs in *-let, -ling*) as [l] is a primitive linguistic symbol expressive of duration or continuation.

4. 59. 2.   Of the recorded OE vbs in *-lian* there are only a few with the nuance of modern *-le* verbs, as *dreflian* 'drivel (from the mouth or nose)', *twinclian* 'twinkle'. PE *wrestle* is OE in *wræstlunge* and *wræstlere*. Most of the PE words were coined in ME and esp. EMoE. It may be partly on account of the literary, conventional character of OE documents that so few verbs are recorded from OE; but the ME period is not rich in coinages either. German *-eln* vbs also crop up in MHG only (see Wi 75).

4. 59. 3.   I have pointed out for *-er* vbs, and the same applies to *-le* vbs that these words should more correctly be called compounds of several symbolic elements. Like *-er*, *-le* is not a derivative sf proper from existing roots. *Twink* is not recorded before 1400, i.e. 500 years later than *twinkle*; *fizzle* is rec. 1532, *fizz* 1665, *quackle* 1564 is older than *quack* 1617. Many vbs have probably never had a simple root without the [l] element, as *drizzle, trickle, rustle, hustle, bustle, shuffle, scuffle*, some are blends, as *struggle, scuffle, hustle* etc.

4. 59. 4.   Verbs matched by a simple basis are *popple* 'bobble up' etc., *wiggle, sparkle, suckle, dazzle* (*daze*), *crinkle* (OE *crincan*), *hurtle* 'strike, drive', *swingle* (all ME), *crackle, scuddle, prattle, crankle, huffle* 'blow' (obs.), *sipple, dwindle* (*dwine*), *dribble, snuffle, grabble, waggle, draggle, paddle, hackle, waddle* (*wade*) (all 16th c.), *pettle* 'fondle, pet' 1719, *noddle* 1733, *dripple* 1821.

Verbs without a basis are *nuzzle, struggle, straggle, trickle, drizzle, scuttle, bustle, hustle, scuffle, shuffle, gurgle, babble, giggle, cackle, jingle, scramble* (recent *scram* is not the origin), *ramble, sniggle, warble, grumble, rumble, whistle.*

4. 59. 5. Verbs denoting sound are less numerous than those expressive of movement. Exs are *gabble, gaggle, cackle, crackle, babble, rattle, prattle, whistle, sizzle, frizzle, tinkle, jingle, giggle, sniffle, tootle, gruntle, rustle, rumble, grumble, mumble.*

4. 59. 6. Usually *-le* goes with a preceding short vowel. It is perh. under the influence of these short vowel verbs that the long vowels of several simple verbs alternate with short vowels in the *-le* verb: *daze/dazzle, prate/prattle, wade/waddle, dwine/dwindle.* I am not forgetting that long vowels were shortened before certain consonant clusters in early Middle English. It would only apply to *dazzle* as the other words are not recorded before the 16th century. We may lengthen the [æ] in *drag*, but lengthening of [æ] in *draggle* is phonetically impossible. On the other hand, *tousle* 1440 has the same vowel as *touse* 1300 (in prefixed forms), *tootle* 1821 the same as *toot* 1510.

-le is prob. a playful element in such words as *wheedle, dawdle, bamboozle* (the only word of three syllables), *foozle, footle, argle, argle-bargle*, but it is also found in unetymologizable words such as *boggle, bungle, puzzle* a.o.

Darkle, grovel, sidle are back-derived from *darkling, groveling, sidling.*

4. 60.   -le, -el /l/ (type spittle)

has formed denominal and deverbal sbs, but can no longer be termed a productive sf in English. In OE, its forms were *-el, -ela, -ele.* Here we are concerned with such words only as have been formed after the OE period.

Derivatives from sbs have diminutive character, as d o t t l e 1440 (OE *dot* is rec. in sense 'head of a boil') 'plug', in 19th c. also 'plug of tobacco', *speckle* 'small speck' 1440, *knobble* 1485 'small knob', its modern variant *nubble* 1818, *nozzle* 1608 (f. *nose*) 'small spout, nose (in various senses)'.

With deverbal sbs it develops various of the meanings usual with this particular class. There exist only concrete meanings, however: *rindle* OE 'small stream, runnel' = *runnel* 1577 (blend of *run* and *rindle*) = dial. *rundle* 1587 (another blend of *run* and *rindle* or the ablaut variant of *rindle*), s p i t t l e 'salive' 1440, *standel* 1543 'young tree left standing for timber'. The idea of 'agent, appliance, instrument' underlies *prickle* OE, *spindle* (= OE *spinel*), *hackle, hatchel, heckle, hetchel* 1300 (but the group is prob. OE) 'instrument for combing flax' etc., *swivel* 1307 (f. OE *swīfan*), *stopple* c 1390 'stopper, plug', *treadle* OE 'step, stair', in sense 'lever' 14...

No coinages have been made since about 1600; as for the deverbal group with the meaning 'instrument', the productivity of the sf had ceased about 1400.

The usual spelling is now *-le*, but *-el* is retained after *v, ch* (for phonetic-orthographical reasons rather).

4. 61. 1.   -less /lɪs, ləs/

is, formally speaking, the negative counterpart of *-ful*; like *-ful* it was still a full word in Old English, in the form *lēas* (= G *los*). In ME it was no longer an independent word, so cbs with *-less* are suffixal words. The sf is

primarily used with substantival bases, conveying the privative meaning 'without, free from . . .'.

4. 61. 2.   From the OE period are recorded c a r e l e s s, *baleless, endless, headless, lifeless, lightless, manless, meatless, mindless, motherless, reckless, restless, shameless, speechless*. From the ME period date *breadless, breathless, colorless, doubtless, faithless, fatherless, faultless, fearless, footless, fruitless, handless, harmless, heartless, hoodless, joyless, lawless, legless, loveless, merciless, mirthless, moneyless, needless, penniless, pitiless, spotless, starless*. 15th c. words are *hatless, listless, mannerless, ruleless* 'lawless'. Later are *hairless, healthless, heatless, honorless, lidless, limbless, limitless, luckless, mastless, matchless, matterless, priceless, sexless, spiritless* (16th c.), *edgeless, gainless, gateless, honeyless, letterless, noiseless, sportless, stateless, stomachless* (first half of 17th c.), *stalkless* 1698, *meaningless, shelterless, thornless, thumbless, tideless, touchless* (18th c.), *functionless, gameless, genderless, germless, grammarless, hammerless, harvestless, hasteless, heelless, humorless, idealess, imageless, keyless, shadeless, sphereless, spineless, systemless, tenseless, trainless, visionless, wireless* (19th c.), *bishopless* 1909.

Derivation from words of French origin was common by 1300. We find the following coinages in the 14th century: *faithless* 1300, *faultless, joyless, merciless* 13.., *doubtless, fruitless* 1340, *moneyless* 1362, *graceless* 1374, *colorless* 1380.

4. 61. 3.   The sfs -*ful* and -*less* are often semantically correlative. Especially the old stock of words shows many such pairs, as *sinful/sinless, baleful/baleless, careful/careless, shameful/shameless, sorrowful/sorrowless, harmful/harmless, merciful/merciless, needful/needless, doubtful/doubtless, restful/restless, mirthful/ mirthless, faithful/faithless, fruitful/fruitless, fearful/fearless, lawful/lawless* (all OE or ME). They were all coined on the semantic basis 'full of . . .'/'devoid of, without . . .'. Thus, they were felt to be co-ordinated, the form in -*less* being the negative of the word in -*ful*. This appears quite natural if we consider that in OE both sfs were still full words with opposite meanings. As early as the 15th c., -*ful* had lost of its original meaning 'full' to such an extent that its correlation with -*less* practically no longer existed. This does not mean that their semantic opposition had ceased to be felt altogether (in many words it is felt to the present day), but the distance between the suffixes was no longer the one that had existed between the words *full* and *less*.

4. 61. 4.   That pairs existed, anyway does not mean that the two types were nothing but correlates. The types are primarily independent of each other. Semantic opposition made them correlative in many word pairs. But there have always been coinages without their counterparts, such as *headless, motherless, loveless, starless | awful, wonderful, skilful, masterful*. As early as the 14th c., adjs in -*ful* had lost their etymological character so far as to make negative counterparts with the prefix *un*- possible (see the list 4. 39. 2). Adjs in -*less* coined since the 15th c. are derived without any relation to possible adjs in -*ful*; they are merely derived from sbs with the meaning 'devoid of, without ...'. If Galsworthy uses *will-less*, this word is not the counterpart of *wilful*, but a derivative from *will* = 'without will'.

4. 61. 5. Such adjs as *restless, doubtless, weariless* (this one probably coined as the counterpart of *weariful,* both 15th c.) could give the impression of deverbal derivatives. It was not, however, before the 16th c. when more words, like *changeless* 1580, *numberless* 1573, had joined the group of ambivalent words, that the type 'caught on'. The majority of common deverbal adjs were coined about the same time, viz. the end of the 16th c.: *quenchless* 1557, *dauntless* 1593, *countless* 1588 (after *numberless*), *tameless* 1597, *fathomless* 1606, *utterless* 1643, *spanless* 1847 are adjs with the passive sense 'not to be . . . ed'. With intransitive verbs the sense is 'un . . . ing': *resistless* 1586, *tireless* 1591, *stayless* 1572 (active or pass.), *fadeless* 1652. Later come *exhaustless* 1712 'inexhaustible' (pass.) and *drainless* 1817 with the same meaning, *thawless* 1813, *stirless* 1816. Most deverbal derivatives occur only in poetry. Jespersen (VI. 23. 32) quotes *imagineless, opposeless, staunchless, teachless, thinkless. Inexhaustless* 1739 is a blend of *exhaustless* and *inexhaustible.*

Haveless 1175 'without possessions' (obs., but newly formed in Sc in the 19th c.) is either deverbal or denominal (the sb *have* is rec. 1200). The coinage was partly a refashioning of older *hæfenlēas,* a denominal derivative.

4. 62. 1. **-let** /lət, lɪt/

is a denominal sf, chiefly with a diminutive sense. The rise of the sf seems to offer difficulties. Early loans from French, as *chaplet, forcelet, hamlet, mantelet* (14th c.), *bracelet, frontlet, gauntlet* (15th c.) have no diminutive force. ''It is somewhat difficult to see how these words gave rise to the English use of *-let* as a diminutive suffix, as none of them, except the heraldic *crosslet,* have the appearance of being diminutives of English words; possibly Fr. diminutives like *enfantelet, femmelette, osselet, tartelette,* were directly imitated by some English writers'', says the OED (s.v. *-let*). The explanation seems to me to be simpler and less forced than 'direct imitation of French usage'. First, we have the word *tartlet* 1420 (with this spelling as well as variants in *-lote, -late*), connected with *tart* 1400. Secondly, such loan words as *castelet* 1320, conn. with *castle, gablet* 1440, conn. with *gable, circlet* 1481 (though perh. somewhat later in dim. sense), conn. with *circle, islet* 1538, conn. with *isle,* though etymologically containing the sf *-et,* probably helped to establish *-let* as a sf. *Crosslet* 1538, conn. with *cross,* could 'legitimately' be considered a word with the sf *-let.*

4. 62. 2. By 1550, *-let* had become an established English formative: a r m l e t 1538 'small arm of the sea' and *streamlet* 1552 (in OED s.v. *-let* wrongly assigned to the 18th c.) are obviously influenced by *islet*; so is the half-latinizing coinage *rivulet* 1587, while *ringlet* 1555 and the half-latinizing *annulet* 1572 join the semantic field of *circlet.* Other Elizabethan words are *townlet* 1552, *taglet* 1578 'small tag, catkin', *kinglet* 1603, *winglet* 1611, *droplet* 1607, deverbal *driblet* 'small sum' 1591. Later recorded are *lamplet* 1621, *earlet* 1668, *sparklet* 1689, *bandlet* 1727, *runlet* 1755. Toward the end of the 18th c. coinages begin to be very frequent, and the sf has ever since grown in productivity, many words belonging to the terminology of anatomy, botany, entomology, zoology. Exs are *leaflet* 1787, *cloudlet* 1788, *spikelet* 1793, *rootlet* 1793, *lakelet* 1796, *eyelet* 1799, *archlet, bladelet, bonelet, booklet, branchlet, budlet, brooklet,*

chainlet, conelet, crownlet, featherlet, finlet, fruitlet, gorgelet, heartlet, hooflet, hornlet, leglet, liplet, notelet, nutlet, plantlet, plumelet, pointlet, stalklet, starlet, tonguelet, veinlet (19th c.).

4. 62. 3. In AE we sometimes find such derivatives as *baglet, buslet, capelet, flatlet* (also BE), *gownlet, playlet* a.o. But the actual frequency of such uncommon diminutives in general cannot compare with that of German diminutives, for instance. English does not know the freedom of coining instanced by such words as *Häuschen, Gärtchen, Deckelchen, Türchen.* Diminution is rather restricted in PE and has shown the same features in the earlier stages of the language too (see E. Rotzoll, op. cit, footnote p. 228, also the works quoted 237 footnote, esp. Eckhardt p. 330).

Words denoting animals are not very numerous. There occur *birdlet, crablet, dovelet, fishlet, goslet* AE (f. *goose*, the vowel after *gosling*), *troutlet* (19th c.), *samlet* 1655 (app. f. *salmon* plus *-let*, the first word contracted and dissimilated).

As the sf is chiefly tacked on to names of things, it conveys a contemptuous nuance to words denoting persons, as *dukelet, lordlet, kinglet, princelet,* also *godlet.* The word *starlet* for a young film star has no derogatory tinge, as the word is not derived from a personal noun; only a sense development has taken place.

4. 62. 4. Deadjectival derivatives are infrequent: *greenlet* 1831 (an American singing bird), *opelet* 1860 'sea-anemone whose tentacles cannot be retracted'. In these words, the sf has no diminutive force, but is merely individualizing (cp. *-ling* for a similar situation).

4. 62. 5. The sf also forms words denoting articles of ornament. The starting-point is the loan f r o n t l e t 1478 (f. F *frontelet* = *frontel-et*), analysed as *front-(forehead)-let.* The series was continued by *armlet* 1535 H, *earlet* 1609 (sense obsolete), and 19th c. words such as *anklet, leglet, necklet, wristlet,* all derivatives from words denoting parts of the body.

Coverlet 1300 is not clear.

4. 63. 1.   -ling /lɪŋ/

forms sbs of the following formal types: s q u i r e l i n g 'poor, petty . . .', s t e e r l i n g 'young . . .', i.e. the sf adds a diminutive resp. depreciative nuance to the person, animal, plant (names of things are excluded, on principle) denoted by the root / g a d l i n g 'special kind of . . .', weak type, used for names of things; the sf has merely individualizing force / p o p e l i n g 'adherent of the . . .', r o c k l i n g 'animal living on . . .' / s o f t l i n g 'one who is . . .', y o u n g l i n g 'animal or plant which is . . .', i.e. deadjectival derivatives / s u c k l i n g 'person, animal, plant connected with what is denoted by the verbal root'.

4. 63. 2. The sf goes back to OE. It is an extension of the OE sf *-ing* and has sprung from words in which *-ing* was tacked on to a stem ending in *-l*, as *æþeling, lytling.* The extension is common Germanic (cp. OHG *ediling* f. *edili, zwinaling* 'twin' f. *zwinal*). In OE the sf is used to form denominal personal sbs, meaning 'one connected with . . .', as *hyrling* 'hireling' (f. *hyr* 'hire'), *yrþling* (f. *yrþ* 'the action of ploughing'), *underling* 1175.

4. 63. 3.   The stages of development were probably as follows:

1) In OE, the sf *-ling* was tacked on to sbs, adjs, and occasionally locative particles with the meaning 'man'.

2) By c 1220, the sf had come to acquire the meaning 'animal' also, i.e. *-ling* was used to derive sbs denoting animals. The earliest attested word is *youngling* in the sense of 'young animal' 1220. Subsequently, *-ling* with the meaning 'animal' developed the following types:

2. 1) *nest-ling* 'animal connected with . . .' 1399.

2. 2) *gray-ling* 'grey animal' 1450.
Most coinages of this group denote small fish. A few words denoting plants have also been formed.

2. 3) The type *shearling*, originally a desubstantival derivative, came to be analysed as derived from *shear* vb, so we have a few deverbal coinages from c 1378 on, chiefly names denoting animals (occasionally used for human beings, as in *suckling* 1440): *eanling* f. *ean* 'bring forth lambs' obs.

3) The type *youngling* 'young animal', gave rise to a new and very strong type *wolf-ling* 'young wolf', *-ling* here being a clipped form of *youngling* (English has never formed compounds containing a diminutive determinatum). This type existed by the beginning of the 14th c.
The idea of youngness and, therefore, relative smallness, has been so strong that it has also extended to coinages of group 2) in that the sf *-ling* forms only words denoting small animals or plants, though those types have an entirely different basis.

4) The latest development is the personal sb with a derogatory shade of meaning, as in *squireling* (see 4. 63. 5) a 16th c. result of applying the preceding types to words for human beings.

4. 63. 4.   An early word denoting an animal is *youngling* 1220 H. Later come *kitling* dial. 1300, orig. denoting the young of any animal (no basis appears to be recorded), *twinling* dial. 1300, *wolfling* 13.., *codling* 1314, *shearling* 1378, *nestling* 1399, *duckling* 1440, *grayling* (fish) 1450, *yearling* 1465, *gosling** 15th. c., *fatling* 'young animal fatted for slaughter' 1526, *porkling* 'small pig' 1542, *kidling* 1586, *eanling** 'young lamb' 1596, *groundling* (fish) 1601, *rockling* (fish) 1602, *catling* 1606, *sandling* (fish) 1611, *gnatling* 1614, *steerling* 1648, *yeanling* 'young lamb or kid' 1637, *brandling* (worm used as bait by anglers; from the color of the red markings) 1651, *gruntling* 'young pig' 1686, *chickling* 18th c., *fingerling* 'young salmon' 1705, *troutling* 1739, *fledgeling* (fr. *fledge* adj) 1830, *reedling* 'the bearded titmouse' 1840, *bridling* 1856, *goatling* 1870.
Wreckling 1601 = *reckling* 1781 'smallest and weakest animal of a litter' is of uncertain etymology, *ridgeling* 'castrated animal' 1555 is not clear either.
Words denoting young plants are *sapling* 1415, *youngling* 1559 H, *oakling* 1664, *seedling* 'young plant' 1660, *timberling* 1787, *wildling* 1840, *yearling* 1849 H, *ashling* 'ash sapling' 1883. All these words have a diminutive sense. *Spindling* 1842 implies the idea of 'weakness'. *Vetchling* 1578 is not different in sense from the simple *vetch* 1374.

Diminutives denoting things are not formed, though nonce-words such as *bookling, eyeling, giftling* may occasionally be found.

Personal sbs implying the idea of 'smallness, youngness' are *stripling* 1398 (app. f. *strip* which is not rec. before 1459, though), *suckling* 1440, *nursling* 1557. *Nestling* and *weanling* denote both young children and animals.

4. 63. 5.   The majority of personal sbs, and all sbs formed after the type *squireling*, have a derogatory shade of meaning. In OE appears the obs. *badling* 'womanish man' (prob. the original from which *bad* is back-derived). The word was, however, too infrequently used to be the cause of the depreciatory shade which is 16th c. only (17th c. according to OED, but see the exs below). The nuance is prob. the result of the combined elements 'smallness' and 'names of animals'. *Fondling* 'foolish p.' 1440 may also have played a part. Exs (from the various formal types given above) are *shaveling* 'priest' 1529, *softling* 1547, *tenderling* 1541, *worldling* 1549, *changeling* 1555, also 'turncoat', *popeling* 1561, orig. 'adherent of the pope' (= G *Römling*), *weakling* 1557, *manling* 1575, *godling* 1570, *scatterling* 'vagrant' 1590, *starveling* 1546, *courtling* 1599, *groundling* 1602, *wormling* 1598 (chiefly fig.). Cp. also *tidling* 'pampered, spoilt child' 1520 (perh. f. *tiddle* 'pamper' 1560) and *bantling* 'bastard' 1593 (prob. repr. G *Bänkling*), words which strengthened the position of depreciatory *-ling*. Of later occurrence are *clerkling, faintling* obs., *dukeling, kingling, lordling* H, *squireling, witling, vainling* obs.

The second world war has added the word *quisling* which is no derivative but which by coincidence stresses the depreciatory tinge of the sf.

Personal sbs which have neither the nuance 'young, small' nor a depreciative shade are quite rare. From OE we have *darling* (OE *dēorling*) and *underling*; later come *earthling* 1593 and such rare words as *deathling* 'mortal' 1598, *tanling* 1611, *sweetling* 1648. *Sibling* is a recent (c 1900) revival of OE *sibling* 'kinsman'.

4. 63. 6.   Words not denoting living beings or plants are not numerous: *fingerling* 1440, in the obs. sense 'finger-stall', *firstling* 1535 'first product', *gadling* 1592 'one of the metal spikes on the knuckles of a gauntlet' (f. *gad* 'spike'), *sideling* 1399 (f. *side*) 'strip of land', *capling* 1688 'cap of leather on a flail'.

4. 63. 7.   *Brisling* 1902 is Norw. *brisling* 'sprat'. *Dilling* (now dial.) 1584 is perh. a var. of *darling*. Whether *middling* primarily belongs here is doubtful. The word is first rec. as an adj (1456), as a sb it is found somewhat later (1543). The sf may be adverbial *-ling* (as in *sideling, headling*), but the sb may also be a derivative from *mid*. It has no depreciative or diminutive meaning, like *firstling* and the few other words of 4. 63. 6.

4. 63. 8.   Desubstantival coinages have always formed the majority. The number of deadjectival derivatives is small (*darling, fledg(e)ling, faintling, fatling, fondling, grayling, softling, sweetling, tenderling, wildling, youngling*); still smaller is the group of deverbal coinings (*gruntling, scatterling, shaveling, shearling, starveling, suckling, tidling, yeanling, weanling*). *Underling, firstling, foundling* are formed from other bases. See reference q. footnotes pp. 228 and 237.

4. 64. 1.   -ly /lɪ/

is an adjectival sf. Its OE form is *-līc*, identical with the sb *līc* 'body' (which has given both *lich* and *(ge)like*). There are corresponding types in the other Germanic languages, and cbs with the respective forms of *līc* must therefore originally have been bahuvrihi cpds, as a substantival second-word indicates a substantival pattern. In preadjunctal use the cbs developed into adjs. The form *-li, -ly* occurs in northern and midland texts as early as the 13th c. and became universal in the 15th c. It is partly the result of *līc* as a middle-stressed syllable (cp. ME *everich/every*), but perh. chiefly due to the influence of Scandinavian words in *-lig*.

4. 64. 2.   The sf is tacked on to sbs and adjs. Cbs of the t. m a n l y have the meaning 'appropriate to, befitting . . .'. The majority of coinages are made from sbs denoting persons, and the sense conveyed is either that of praise or blame. Exs are *friendly* OE, *kingly, knightly, maidenly, manly, mannerly, shapely, stately, womanly* (ME), *princely* 1500, *queenly* 1540, *portly* 1529, *soldierly* 1577, *orderly* 1577, *pastorly* 1616, *tutorly* (rare) 1611, *scholarly* 1638, *masterly* 1666 H, *loverly* 1875, all implying praise, *beastly, homely* 'unpolished, rude' (ME), *slovenly* 1515, *beggarly* 1526, *cowardly* 1551, obs. *bastardly* 1552, *ruffianly* 1570, *dastardly* 1567, *masterly* (in depreciative sense 1531—1766), *rascally* 1596, *vixenly* 1677, *scoundrelly* 1790, all words implying blame or odium.

4. 64. 3.   In Old and Middle English the sf still formed derivatives with the non-specialized neutral sense 'characteristic of, belonging to . . .', as *lively, deathly, fleshly, heavenly, lovely, summerly, wordly* (OE), *homely, timely* 'well-timed', *shapely* (ME). The type is rare in MoE: *leisurely* 1604, *sprightly* 1596, *townly* 'townish' 1749, *weatherly* 1729 (said of a ship, 'able to sail close to the wind'). In Old and Middle English the sense is also inherent in derivatives made from personal sbs: *fatherly* 'paternal', *motherly* 'maternal', *priestly* 'sacerdotal' (OE), *manly* 'human', *godly* 'belonging to god, spiritual' (ME).

4. 64. 4.   The type g o o d l y has formed many words in OE, a few in ME and MoE, but is no longer productive. The sf conveys the shade of 'resemblance to the quality implied in the basis' (cp. *-ish*), but most of the derivatives have developed more or less independent senses from the simple adjs (*cleanly* has even lost its formal connection with *clean* through the difference in pronunciation). Exs are *cleanly, deadly, goodly*, obs. *grimly, loathly* (OE), *gainly, lowly, meetly, sickly* (ME), *weakly* 1577, *lonely* 1607, *poorly* 1750. The type has never been used for adjs denoting color, this function being performed by *-ish* and *-y*.

4. 64. 5.   With the sf tacked on to sbs denoting time we get cbs of the t. w e e k l y. The sense implied is 'recurring every . . .', as in *daily, nightly, yearly, summerly, winterly* (OE), *weekly* 1489, *hourly* 1513, *quarterly* 1563, *monthly* 1572, *termly* (now rare) 1598, *fortnightly* 1800. The use of part of these words as primaries, chiefly to denote newspapers or periodicals, is a 19th c. development (*quarterly* 1818). Used as subjuncts (adverbs), they represent originally the advervial formative *-lice*: OE *gēarlice*, but from the end of the 14th c. the adj is used as a subjunct: *yearly* 1375, *daily* 1440, *nightly* 1457, *hourly* 1470.

4. 64. 6.   In OE, numerals, locative particles and participles also admitted of
the sf: *ānlic* 'only', *þrēolic* 'threefold' / *inlic, ūtlic* 'inner, outer', *norþlic* / *brecendlic*
'fragile', *ācorenlic* 'eligible' (cp. Eduard Schön, Die Bildung des Adjektivs im
Altenglischen, Kiel, Diss. 1905). Except for *ānlic* = PE only, none of the
preceding words survived into ME.

4. 64. 7.   In MoE we have derivatives of the type n o r t h e r l y. The adjs are
extensions of the older words *norther* (901—1497), *souther* (900—1622), *easter*
(1387—1816), *wester* 963 which have been variously extended (cp. *norther,
northern, northerly, northermost, northernly, northernmost*). The words of this
type occur from about 1550: *easterly* 1548, *northerly, southerly* 1551, *westerly*
1577, *northeasterly* 1739, *northwesterly* 1611, *southeasterly, southwesterly* 1708.
As adverbs, they are all quoted later.

4. 64. 8.   The range of *-ly* is much smaller than that of G *-lich*. This is chiefly
due to the invasion of French and Latin which established non-native suffixes
(and prefixes) or introduced a flood of Latin and Romance words superseding
the old words and preventing the further extensive coining of words after
traditional patterns. Besides *kingly* the language had *royal* and *regal*, besides
fatherly, paternal etc. etc. This process of borrowing was bound to limit a further
growth of *-ly*. It may also be that the use of *-like* as a second-word has contri-
buted to the narrowing down of the sphere of *-ly*. There was obviously a
strong need for a means of expressing the idea 'resembling, in the manner
of . . .' more clearly than it was done by *-ly*. Adjectives of the *-like* type crop
up at the beginning of the 15th c.

4. 65. 1.   -ment /mənt/

is a substantival sf, chiefly forming deverbal nouns from Romance roots. It
came into the language through loans from continental Old French and Anglo-
French. Exs of ME loans are *abetment, achievement, admonishment, adornment,
advancement, agreement, appeasement, appointment, assignment, commencement,
easement, enticement, judgment, preachment*. As the corresponding verbs also
existed as loans from French, *-ment* quickly came to be established as an
English formative. By 1300, *-ment* was obviously a derivative suffix though
many of the 14th and 15th century coinages were short-lived. Examples are
chastisement 1303 f. *chastise* 1325, *eggment* 'incitement' 1340—1440 f. *egg*
'incite', *onement* (coined by Wycliffe to render L *unio*) 1388, *increasement*
1389 f. *increase, hangment* 1440 f. *hang* and a few more rare words which are
obsolete today (see Gadde 72—74). After 1450 the derivative pattern seems
to be stabilized. We find *endowment* 1460, *enfeoffment* 1460, *annulment* 1491,
controlment 1494, *publishment* 1494. Later are a b a s e m e n t, *allotment, al-
lurement, arraignment, assessment, astonishment, bailment, blandishment, con-
signment, endorsement, garnishment, languishment, management, obligement,
releasement, representment, retirement, revilement, treatment* (16th c.), *abandon-
ment, aggrandizement, amassment, amusement, apportionment, ascertainment,
assortment, commitment, concernment, confinement, engagement, engorgement,
engraftment, environment, estrangement, involvement, securement* (17th c.),
arrangement, equipment, escapement, harassment, measurement, statement
(18th c.), *bevelment, placement* (19th c.), all from non-native roots.

4. 65. 2.   Derivatives from native roots are wonderment 1535, *merriment* 1576 (f. obs. vb *merry*), *acknowledgement* 1594, *needments* 1590, *amazement* 1595, *betterment* 1598, *bodement* 'omen' 1605, *fitment* 1608 (ref. in 19th c.), *settlement* 1626, *scribblement* 1608, *fulfilment* 1775; see also below for sbs with the prf *en-*, *em-*, *be-*. From the 19th c. on there are a few more coinages, as *catchment, hutment, jostlement, puzzlement, shipment, worriment, worsement* (after *betterment*).

4. 65. 3.   Exceedingly frequent are words with the prf *en-*, *em-*: *endowment, enfeoffment* 1460, *endorsement, engrossment, enhancement, embarkment, embezzlement, embattlement* (16th c.), and later words such as *engulfment, enlightenment, enlistment, ennoblement, embalmment, embankment, embarrassment, embayment, embellishment, embodiment* etc.

There are also a good number of words with the prf *be-*, from native as well as Romance roots, as *besiegement* 1564, *betrothment* 1585, *benightment* 1651, *beseechment* 1679, *bereavement* 1731, *befoulment, beguilement, beleaguerment, belittlement, bemuddlement, benumbment, bepuzzlement, besetment, bewilderment* a.o. (19th c.).

4. 65. 4.   After *merriment* (whose basis *merry* had become obsolete as a vb, OE — 1627) 1576 has been coined *funniment* 1845. ADD has *foolishment. Oddments* 1780 'odds and ends' is another deadjectival derivative, perh. direct fr. *odds* after *needments*. Spenser coined *dreriment, hardiment, iollyment, unruliment* (q. Jesp. VI. 21. 82) which have not gained currency. The ADD has *leftments* 'fragments, remainings'.

Basement 1730 is derived fr. vb *base* 1587 'lay a foundation', *devilment* 1771 is fr. vb *devil* 1593, though both words look like desubstantival coinages.

4. 65. 5.   Sbs in *-ment* have the meanings which are usual with deverbal sbs. They denote 1) act or fact of . . ., with a tendency to signify a specific instance, as in *appointment, arrangement, development, enactment, encampment, enthronement*, etc.; 2) something concrete or material connected with . . ., as *embankment, embodiment, embayment, equipment, reinforcement, advertisement* etc.; 3) the state of being . . . ed (chiefly from verbs denoting mental or emotional state), as *astonishment, amazement, bewilderment, embarrassment, embitterment, estrangement | enthralment, encampment, betterment, internment*; 4) the place connected with . . ., as *encampment, settlement* (the group is comparatively small). Many words join several sense groups.

Sense group 3) has been especially productive for the last 150 years. Many words with the basic meaning 'embarrassment, bewilderment' or the like, were coined in the 19th c. More recent are *perturbment* 1901, *puzzlement* 1922. Old is *rabblement* 'disturbance' 1548.

The word *containment* 1655 is marked 'rare' in OED. But since World War II it has become quite common in the expression 'policy of containment'.

4. 66.   -mo /mo/

is a sf, originating from printers' slang. The Latin names for certain sizes of books, as *duodecimo* 1658, *sextodecimo* 1688 were in practice spelt as 12mo, 16mo. This led to the spelling pronunciation t w e l v e m o 1819, *sixteenmo*

1847. The possibilities are naturally restricted. The lower divisions, as *quarto* and *octavo*, were never affected, but several other names of book sizes were coined with the sf, as *eighteenmo* 1858, *twentymo*, *twentyfourmo* 1841, *thirty-twomo*, *thirty-sixmo* 1841 (where the etymological connection with the Latin numerals, which are *vicesimo quarto*, *tricesimo secundo*, *tricesimo sexto*, is broken).

4. 67. 1.　-most /məst, most/

is an adjectival and adverbial sf chiefly tacked on to locative particles and adjs derived from the names of the cardinal points, expressing the highest degree possible with regard to the position or direction indicated by the basis. Historically, it is not related to *most*, but is the OE superlative ending *-mest*. The earliest stage of the sf is found in OE *æftemest*, *fyrmest*, *inmest*, *ūtmest*. This group of derivatives from locative particles was joined by the adjectival derivative *midmest* 'midmost' and subsequently extended to other words denoting place, direction, or time, as *ēastmest*, *westmest*, *norþmest*, *sūþmest* / *lætmest*, *siþemest* 'latest'. As early as OE these cbs were felt to contain *mǣst* 'most' for a second-word and were often spelt accordingly. The spelling subsequently became the rule and has always been retained though the colloquial pronunciation is now [məst].

4. 67. 2.　Another change of linguistic feeling is expressed in the adaptation of *aftemest* and *ovemest* (f. *æftemest* and *ufemest*) into *aftermost* (1160, sp. *after-mest*) and *overmost* (a 1300, sp. *ouermast*) in ME. *Aft* and *ufe* were no longer locative particles in ME. *Formest* (f. OE *fyrmest*) was later revived: 15th c. *foremest*, 16th c. *foremost*. *Nethermost* (sp. *neþermast*) is recorded a 1300, a refashioning of earlier *nethemest*, OE *niþemest*. Thus, by 1300, as far as derivation from locative particles is concerned, we have *-mast*, *-most* tacked to first-words in *-er* in aftermost, *nethermost*, *overmost*, also in *uttermost* (a 13. .), and other coinages follow: *furthermost* 1400, *hindermost* 1398, *innermost* 1413, *uppermost* 1481 = *uvermost* 1549 (now dial.), *undermost* 1555, *farthermost* 1618, *outermost* 1857. The OED explains the rise of the type "on the analogy of earlier adverbial forms in *-more*" (s.v. *-most*). It should, however, be noted that of the earliest *-most* words, *aftermost* has never had a counterpart in *-more* and that *nethermore* 1382, *overmore* 1390, *uttermore* 1382 are much later re-corded than *nethermost*, *overmost*, *uttermost* (all 13. .). Other *-more* words, as *furthermore* 1200, *outermore* 1388, *farthermore* 1300 have been matched by *-most* words rather late (see above), so I think *-more* words have played little or no part in the rise of *-most* words. The rise of the type is sufficiently explained by a tendency to derive from resp. connect with the locative particle. This also accounts for the early refashioning of *utmest* into *outmost* (sp. *oute-meste* 13. .) as *utmost* had lost its connection with *out* (the ME spellings *ote-*, *otte-*, *ot-most* as well as the phonetic development go to show this).

4. 67. 3.　The use of *-er* forms as first-words spread to other formations, perhaps partly as a mere mechanical extension in lowermost 1561, rare *highermost* 1629, *lattermost* 1821. On the other hand, the *-er* first-words seem to have represented adjectival forms for the speaker, which explains the for-

mations *eastermost* 1555 (obs.), *westermost, southermost* 1555 (now rare), *northermost* 1557 (the independent adj *norther* has no quotations in OED after 1497), subsequently replaced by *westernmost* 1703, *northernmost* 1719, *southernmost* 1725, *easternmost* 1830 with the current MoE adjs *northern, eastern, southern, western* instead of the earlier *norther* (OE—1497), *easter* (1387—1816), *souther* (OE—1622), *wester* OE (ch. Sc). *Out* has at all times been a first-word with sbs (t. *outhouse*) which may account for the preference given to *outmost*. *Outermost* is quite recent (1857). On the other hand, *upmost* 1560 joined *uppermost* 1481 on the analogy of *inmost/innermost, utmost/uttermost, hindmost/ hindermost*, and the latest addition is the just mentioned *outermost*. The tendency with derivatives from locative particles and names of the cardinal points is to take the adjectival derivative from the respective word as the basis and append *-most* to it. Cp. also *westwardmost* 1685 (no other *-ward* derivative is recorded).

4. 67. 4.   The sf is also tacked on to other words denoting local position. As far back as OE we have *midmest* which became *midmost* and was in the ME period joined by *middlemost* 1300 (sp. *-mast*), in the 19th c. by *centremost* (1866). Other exs are *hithermost* 1563, Sc *yondmost* 1608, *sternmost* 1622 'farthest in the rear, nearest the stern', *topmost* 1697, *rearmost* 1718, *backmost* 1782, *downmost* 1790, *bottommost* 1861, *leftmost, leftermost* 1863. From a pronominal adverb is *hithermost* 1563.

An isolated coinage is *bettermost* 1762, a mere superlative. *Utmost* and *uttermost*, too, no longer primarily express the idea of position.

4. 68. 1.   **-ness** /nəs, nɪs/

forms abstract sbs with the meaning 'state, condition, quality of . . .'. Since OE it has chiefly been tacked on to adjs and participial adjs, but in MoE it is also used with various other bases, but not with verbs.

Exs of deadjectival derivatives are **bitterness**, *brightness, cleanness, coolness, darkness, deepness, dimness, drunkenness, evenness, fairness, fatness, fleshliness, goodness, greediness, greenness, grimness, hardness, idleness, longness, thickness*, all recorded in the OE period. The sf has been appended to adjs of native as well as foreign origin. From the ME period or later are recorded such words as *absoluteness, acuteness, alimentiveness, ancientness, aptness, archness, badness, baldness, bareness, baseness, bayness, beastliness, bigness, brawniness, callousness, closeness, commonness, coyness, deadness, deafness, dearness, dullness, farness, fatalness, fineness, firmness, fitness, freeness* (ME, now rare), *goodliness, greyness, gumminess, halfness, handiness, humanness, kindness, meanness, rashness, readiness, righteousness, sickness, straitness, steadfastness, carelessness, hopelessness, lifelessness, listlessness | artfulness, wilfulness, wistfulness* etc. etc.

4. 68. 2.   Though theoretically the sf may be tacked on to any adj, those of native stock form the majority. Next in number are everyday words of French origin. Derivation from adjs of French origin was common by 1300. We find quite a number of them in the 14th century: *clearness, feebleness, gentleness, tenderness* are recorded about 1300; other derivatives are *beastliness* 1370,

curiousness 1386, *eagerness* 1400, *faithfulness* 1388, *fierceness* 1382, *fineness* 1400, *gayness* 1377, *meanness* 1398, *nobleness* 1400, *rudeness* 1380, *safeness* 1375, *justness* 1430. Formative restrictions exist in so far as adjs in *-ate, -ant, -ent* chiefly derive sbs in *-acy, -ancy, -ency,* those in *-al, -ial, -an, -ian, -ar, -able,* sbs in *-ity* (see the respective sfs). The sfs often compete and we have sense or other variants such as *accuracy/accurateness, entireness/entirety, sincerity/sincereness, oddity/oddness, singularity/singularness, fatality/fatalness, inflexibility/inflexibleness, inextricability/inextricableness* a.o. Jespersen's statement that "comparatively few words from Romanic adjs are in common use" (VI. 19. 32) needs qualification, as appears from the above list and other words such as *corruptness, promptness, conciseness, usefulness, coarseness, curtness, daintiness.* Cp. 4. 55. 4 for *-ableness/-ability.*

4. 68. 3.   Derivatives from composite adjs are also common. Exs are w r o n g- h e a d e d n e s s *short-sightedness, level-headedness, kindheartedness, square-toed-ness, tongue-tiedness, straight-forwardness, watertightness, outrightness, over-niceness* etc.

Derivatives from participial adjs are *drunkenness* OE, MoE *contentedness, ashamedness, devotedness, cursedness, goneness* 'exhaustion', *setness, un-acquaintedness, unexpectedness* etc. | *knowingness, lovingness, shiningness, shockingness, thrillingness, thrivingness, willingness.*

The sf may be tacked on to pseudo-adjs, i.e. such as can only be used pre-dicatively. Exs are *awareness, aliveness, aloneness, aloofness.*

4. 68. 4.   Cbs with numerals are *oneness* OE (recoined in the 16th c.) and *twoness* 1648.

Derived from locative particles are *outness* 'externality' 1709, *inness* 1866, both philosophical terms. We may quote here the word *utterness* 1827 which is a derivative from *utter* and thus ultimately connected with the locative particle *out.* In sense it is, however, a coining from *utter* as a quasi-superlative, meaning 'absoluteness, extremeness'.

Cbs with comparatives are *betterness, worseness* (ME). Exceptional are derivatives from superlatives, as *dearestness, nearestness* (q. Jesp. VI. 19. 33).

4. 68. 5.   There are also derivatives from pronouns and pronominal adverbs, chiefly used as philosophical or philosophizing terms, with the exception of *suchness* (OE) and *muchness* (ME) all MoE. Exs are *halfness* 1530, *otherness* 1587, *sameness* 1581, *selfness* 1586, *thisness* 1643 (translating ML *haecceitas*), *manyness* 1609, *nothingness* 1631, *whatness* 1611 (tr. L *quidditas*), *allness* 1652, *hereness, thereness, whereness, everywhereness* (1674 all). *Thusness* 1867 is jocular, coinages such as *I-ness, me-ness, whenness, whyness* are nonce-words.

4. 68. 6.   The sf is also possible with phrases which are used as preadjuncts or predicatives. So we find, chiefly since the 19th c., such words as *à-la-modeness* 1669, *fedupness, matter-of-courseness, matter-of-factness, used-upness, every-dayness, well-to-doness, up-to-dateness* (all 19th c.), some of them quite fre-quently used now.

4. 68. 7.   Occasionally there have been coined derivatives from sbs (out of their use as preadjuncts or predicate complements), as *breadness* 1866 'the

quality of being bread (in connection with the transsubstantiation)', *manness* 'manhood' (Steinbeck, The Pearl 83; the OED has one ex fr. 1225 for *manness* 'human nature'), *childness* (Sh), *gameness* 1810 (*game* is perh. a full adj now). Obs. is *seedness* (1440—1710) 'state of being sown' (the OED derives it from vb *seed* which cannot be as -*ness* is no formative with deverbal sbs). OE had *hǣðennes* which lives in archaic form *heathenesse*, early associated with the -*ess* of *richess*, *largess*. Dead are OE *nȳdness*, *rādness* 'readiness', *rūmness* 'roominess'. *Witness* is orig. a desubstantival derivative (fr. *wit* 'knowledge'), meaning 'testimony' (cp. the phrase *bear witness*). The word subsequently developed the sense of 'person giving evidence' (cp. PE *counsel* for a similar sense development).

4. 68. 8. *Business*, OE *bisignis*, is a moneme today (as the pronunciation shows). As a derivative from the adj *busy* it is pronounced ['bɪznɪs], usually characterized in spelling also, as *busyness*, recorded since 1868. *Wilderness* 1200 is prob. a derivative from the adj *wildern*, with a concrete meaning (see below). *Forgiveness* OE is said to be a derivation from the sec. ptc *forgiven* (OED); but it is perh. rather from the deverbal sb **forgive*, as in *forgively* 1225. The OE spellings are *forgifenes*.

4. 68. 9. In all stages of the language the sf has chiefly formed sbs with an abstract meaning. An abstract state often comes to appear specified in a particular instance, a general characteristic of abstract sbs. Very rarely sbs in -*ness* denote something concrete. Exs of this nuance are OE *smiriness* 'oil', *sweartness* 'ink' (cp. G *Druckerschwärze*), *frætwednes* 'ornament', *fastness*, *wilderness** 'place', *gumminess* 'a gummy concretion', *witness* (see above).

4. 69. 1. -ory /ərɪ, ɔrɪ/

forms adjs on a Latin basis of coining. All combinations have a learned or scientific tinge.

The Latin form is -*orius*. This sf is an extension of -*ius* as tacked on to agent sbs in -*or*. Its original meaning is 'pertaining to, having the character of what is denoted by the agent sb' (*accusator-ius*). Latin agent sbs are derived from the second ptc, so what originally was conceived as *accusatorius* could also be analyzed as *accusat-orius*. In this manner, the sf came to be connected with the verb itself rather than with the agent sb. Latin words such as *absolutorius*, *damnatorius* (*sententia absolutoria*, *sententia damnatoria* 'acquittal' resp. 'condemnation') show this new character. Latin more and more developed this shift of standpoint, and adjs in -*orius* were coined from the second ptc of verbs, chiefly meaning 'destined to . . .', as *falx messoria* 'mowing-sickle', *sella portatoria* 'carrying-chair (sedan chair)', some with the nuance 'having the nature of . . .', as *transitorius*, *contradictorius*, *elusorius* a.o. The sf has been very productive in the various stages of Latin. The following is a short list of words most of which have been anglicized: *absolutorius*, *accusatorius*, *amatorius*, *auditorius*, *damnatorius*, *deprecatorius*, *obiurgatorius*, *piscatorius*, *praedatorius*, *prohibitorius*, *pugnatorius*, *suasorius*, *transitorius* (CL), *completorius*, *compunctorius*, *contradictorius*, *dispensatorius*, *explanatorius*, *hortatorius*, *illusorius*, *motorius*, *oblectatorius*, *perfunctorius* (LL), *communitorius*, *com-*

pulsorius,   diffamatorius,   promissorius,   requisitorius,   satisfactorius (ML), *migratorius, respiratorius* (NL).

4. 69. 2.   We find few E words before 1500. Exs are *transitory* 1374 (= F *transitoire* 13th c.), *requisitory* 1447 and *obligatory* 1456, both law terms, prob. F *réquisitoire* 1403 resp. *obligatoire* 1330; but for *contributory* 1467 no pattern is recorded, so the word may be one of the earliest Ecs. On the other hand, it must be borne in mind that the present state of Latin and French lexicology does not admit of the conclusion that absence of record means the non-existence of a word.

The earliest English words are renderings of OF words in the northern French form *-ori, -orie*. The central French form was *-oire*, but English kept the oldest form, subsequently changing it into the graphic variant *-ory*. They have already been quoted. Few words are recorded from the 16th c. for which neither a French nor a Latin pattern appears to exist, as *condemnatory* 1563, *expostulatory* 1586, *feudatory* 1592 (f. ML *feudare* 'enfeoff'). Words of this category, coined after 1600 are *oblatory* 1611, *confirmatory* 1636, *affirmatory* 1651, *explicatory* 1625, *ejaculatory* 1644, *excretory, inflammatory* 1681, *val-edictory* 1651, *gustatory* 1684, *vindicatory* 1647. From the 18th c. we get *in-spiratory, rotatory, statutory, vacillatory, vibratory,* and from the 19th c. such words as *appreciatory, investigatory, informatory, observatory.*

4. 69. 3.   Adjs in *-ory* are Latin coined, derived from the stem of the second ptc. They have nothing whatever to do with Latin agent sbs (the explanation of the OED, s.v. *-ory,* is misleading in this respect; see also sf *-al, -orial*). However, for the PE speech feeling they are connected with the English verb which in the majority of cases exists, and the adjs in those cases are stressed on the same syllable as are the vbs. The stress pattern is *affírm/affírmatory* resp. (for vbs with the termination *-ate*) *appréciate/appréciatory.* Of the adjs listed above, insofar as they are accompanied by a verb, only *rótatory* is stressed against the tendency, as compared with *rotáte*; but only so in BE: in AE the stress pattern is in line with the general rule = *rótàte | rótatòry.* As for the stress of the adjs which are not matched by English verbs, they are chiefly stressed on the fourth syllable from the end. Most of the above adjs in question con-form to this stress pattern, also *auditory, absolutory, hortatory, oblatory, re-quisitory, transitory* a.o. *Valedictory* is stressed after *contradictory.* Stressed on the antepenultimate are *elusory, illusory, perfunctory.*

4. 69. 4.   The usual semantic implication of adjs in *-ory* is 'destined to, serving for, tending to . . .', but the nuance is often merely 'connected with, pertaining to . . .' is denoted by the (Latin resp. English) vb. In the latter shade of meaning, adjs in *-ive* often compete with those in *-ory* (see sf *-ive*).

English makes a pretty clear distinction between adjs directly derived from Latin agent sbs in *-or* and such as have a direct connection with the action of the Latin vb. The latter group is characterized by the sf *-ory,* the former by the sf *-orial.* The matter has been discussed under sf *-al,* so we will only add a few such things as seem necessary here. Sf *-ory* is not used at all with denominal personal sbs in *-or.* L *uxorius, sororius, praetorius* (which is deverbal only for the philologist) are rendered as *uxorial* 1800, *sororial* 1825,

praetorial 1579. Occasionally L adjs in *-orius* are derived from denominal sbs, but they have been short-lived, as *gladiatory* 1602—1730, *senatory* 1523—1684, and the validity of the rule stated is not impaired by isolated coinages. The rule also applies to adjs derived from deverbal agent sbs, as we have pointed out elsewhere (see *-al* 4. 6. 6).

4. 69. 5.   A small number of words is synchronically analysable as E vb plus *-atory* [ətəri, ə͵tɔrɪ]. The group comprises only adjs taken from Latin, i.e. the type has produced no English coinings. Exs are *accusatory, affirmatory, confirmatory, informatory, observatory.*

4. 69. 6.   The sfs *-ary* (165) and *-ory* are entirely homophonous in BE, in AE they are so only when the stress immediately precedes, as in *eleméntary, satisfáctory.* In other positions, the sfs receive a secondary stress and are then differentiated: *inflátionàry* [æɪ], but *obsérvatòry* [ɔrɪ]. This goes to show that we have to do with two different morphemes which become neutralized in poststress position. Moreover, the derivational processes of *-ary* and *-ory* are sufficiently distinct from each other: *-ary* is a living formative, deriving adjs from English sbs, most of which are analysable as derivatives on a nb, whereas *-ory* forms deverbal adjs of which a small part only are analysable on a native basis. I therefore disagree with Stanley S. Newman who maintains that "these forms represent the same suffix as tested by functional criteria and by formal criteria other than phonetic form" (Word 4. 26).

4. 70. 1.   -ous /əs/

is an adjectival sf which came into English through ME loans from French, such as *advantageous, adventurous, ambitious, amorous, cavernous, contagious, contentious, contumelious, courageous, dangerous, famous, feverous, glorious, grievous, lecherous, riotous, savorous, superstitious, timorous, torturous, traitorous, treacherous, troublous, venomous, virtuous, viscous.* These adjs have the meaning 'full of . . ., of the nature, character or appearance of . . .', the implication always being that of strikingness, even obtrusiveness. The nuance is due to the character of Latin *-osus* which OF *-ous, -os, -eus* represents (see below). From the 14th c. we have *-ous* as an English formative, originally with sbs of French origin only. The sf has been very productive. On a native basis of coining it has derived adjs from sbs of French, Latin and native origin, as *poisonous* f. *poison, burdenous* f. *burden,* also by way of correlative derivation, as *infectious* f. *infection.* On a Latin basis of coining, the sf has derived adjs from the stem of Latin sbs, as *platitudinous* f. *platitudin-,* stem of *platitudo.* The sf has also been used to adapt Latin and Greek adjs whose termination did not fit an English pattern, as *vacuous* for *vacuus, analogous* for *analogos.*

4. 70. 2.   Type poisonous f. poison: *gluttonous* 1340, *villainous* 13.., *adulterous* 1470 (f. obs. *adulter* 'adulterer', after *lecherous*). Obs. *felonous* 1374 is derived from *felon, treasonous* 1450 f. *treason* (after *traitorous, treacherous*), obs. *rebellous* 1432 f. *rebel, poisonous* 1565 f. *poison* (after *venomous*), *odorous* 1550 f. *odor* (after *savorous*), *hazardous* 1580 f. *hazard, sorcerous* 1546 f. obs. *sorcer* 'sorcerer', *verdurous* 1604 f. *verdure, momentous* 1652 f. *moment, leaven-*

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ous 1649 f. *leaven, founderous* 1767 f. vb *founder*. A few other words are *cavernous, cadaverous, cancerous, glamorous*.

Type thunderous f. thunder. Derivatives from native roots are not numerous. *Timous* 1470 (f. *time*) is quoted in OED as 'chiefly Sc.'. Obsolete is *burdenous* 1529, coined after *onerous* (= OF). The few words which have gained general currency are derived from words ending in *-er* of which many are connected with the semantic field of 'noise, uproar, violence': *slumberous* 1495, *wondrous* 1500 (after *marvellous*), *murderous* 1535, *slaughterous* 1582, *blusterous* 1548, *thunderous* 1582, *tetterous* 'of the nature of tetter' 1719. *Boisterous* 1474 is of uncertain etymology. The earlier form is *boistous*. *Hugeous* 1529 as an extension of an adj is an uncommon type. The influence of related *gorgeous* 1495 has perhaps played a part in its coining.

4. 70. 3.   On the analogy of *glorious* (as f. *glory*), *contumelious* (as f. *contumely*) we have since the 16th c. derivatives from sbs in *-y*, as *felonious* 1575, *prodigious* 1552 (or L *prodigiosus*), *perfidious* 1589 (or L *perfidiosus*), *usurious* 1610, *burglarious* 1769. The word *felonious* could also be connected with *felon*, in which case the sf was *-ious*. *Rebellious* 1535 ousted the earlier *rebellous*, either because *-ious* had come to be felt as an independent sf, or because of a blend of *rebellous* and *rebellion*, or because of the possible influence of *contentious* and *contumelious*. In the same semantic field belong *robustious* 1548, orig. meaning 'violent, noisy, boisterous, strongly self-assertive', extended from *robust*, and *uproarious* 1819 f. *uproar*.

Combinations with the sf *-ious*, synchronically speaking, include *acrimonious, ceremonious, harmonious, furious, industrious, sacrilegious* alternating with *acrimony, ceremony, harmony, fury, industry, sacrilege* (note the phonological changes of stress and vowel).

4. 70. 4.   On the analogy of the loan pairs ambition/ambitious, *contagion/contagious, contention/contentious* were derived other adjs in -tious from sbs -ion, -tion, as *cautious* 1640, *repetitious* 1675 (common AE), *precautious* 1711, *fractious* 1725. Extended we have the pattern in the correlation -atious/ -ation: *vexatious* 1534, *ostentatious* 1658, *disputatious* 1660 (not from *dispute*, as in Jesp. VI. 19. 75), *flirtatious* 1834, *quotatious* 1903. *Oblivious* 1450 may be L *obliviosus* (OED) in which case we would have an early instance of Latin influence which otherwise sets in after 1500, as far as *-ous* is concerned. It is also possible to connect *oblivious* with now obs. *oblivy* (though this is not recorded before 1475 which should not weigh too much).

4. 70. 5.   The word *robustious* seems to have been the starting-point for the sf *-tious* [šəs] which is found with a group of adjs formed more or less fancifully, the [š] being emotionally expressive of 'pushing' energy. *Robustious* attracted *rumbustious* 'turbulent, boisterous' 1778 (the *rum* prob. as in *rumble*), *rumgumptious* 'quarrelsome, violent, bold, rash' 1781, its variant *rambunctious* 1854, *rumbumptious* 'quarrelsome' (ADD), *bumptious* 'offensively self-conceited' 1803 (with a play on *bump* 'protuberance of the cranium as the seat of peculiar mental energy').

Scrumptious 'first-rate' 1836 contains the sf, the root may be, as the OED suggests, a variant of *scrimption* (f. *scrimp*) 'small quantity'. *Gumptious* (acc.

to OED recent) is derived from *gumption* 'shrewdness, courage' 1719 (which I cannot explain; it is orig. Sc). *Goluptious* 'luscious, delightful' 1856 may be vaguely associative of *voluptuous*. The ADD records *sniptious* 'smart' (f. *snip*; cp. *snippish*).

4. 70. 6.   ⳑeous /ɪəs/.

The words *bounteous* and *plenteous* are loans, representing OF *bountivous*, *plentivous*. This is also the original English spelling which was, towards 1400, adapted to the words *bounte, plente* (= PE *bounty, plenty*). The pattern attracted other derivatives, as *beauteous* 1440, *duteous* 1593. The word *piteous* 1297 is OF *pitos*. It had various spellings in ME (as *pitous, pituous, piteuous, pitevos*, also *pytewys* which seems to indicate that the termination was somehow connected with *-wise*; on the other hand, *rightwise* was in the beginning of the 16th c. fashioned into *righteous*), but from about 1500 the PE spelling prevails. *Hideous* 1300 is ME *hidous* (= OF *hidous*), after 1500 refashioned into *hideous*, apparently after *beauteous*. *Gorgeous* 1495 (repr. OF *gorgias*, of uncertain origin) received its termination from *plenteous*. ME *courteis* (= OF *courteis*) did not fit into any English terminational pattern, in the 16th c. it was adapted to the *-eous* group (perh. vaguely in association with *beauteous*).

Phonologically, *bounteous, plenteous, beauteous, duteous, piteous* are *-ous* derivatives from *-ty* sbs. With speakers who pronounce *courteous* [kɔ(r)tɪəs], the form of the sf is [ɪəs]; but for those who pronounce *courteous* [kɜ(r)tɪəs] the word is no derivative at all. Similarly *hideous* and *gorgeous* are not derivatives as they are unconnected.

4. 70. 7.   Stress: derivatives in *-ous* have the stress pattern of the underlying theme. An exception is *moméntous* f. *móment*. *Courageous* and *advantageous* have not developed homological stress either. Till the 17th c., as the spelling shows (see OED), they were commonly apprehended as containing the sf *-ious* and therefore retained the antepenult stress of words in which *-ous* was preceded by a vowel. Later phonetic changes have not modified the original stress, so the stress is always on the syllable preceding [ɪəs], [tɪəs], [šəs], [ærɪəs], [ɔrɪəs].

4. 70. 8.   CL has a great number of adjs in *-osus*, as *annosus, bellicosus, copiosus, famosus, periculosus*, a type which was still stronger in popular Latin and increased in LL and ML. The original meaning was 'full of, abounding in . . .', but the shade 'resembling, like . . .' (as in *globosus* 'round, like a ball') was frequent enough. Such adjs denote a conspicuous, remarkable quality or appearance. Many of the words passed into French where the type was further developed. Beginning with the 13th c., English borrowed words like the ones that have been listed above. The L form *-osus* became *-ous* in OF, and this is the form English has preserved, using it also for the rendering of Latin words in *-osus*. We cannot always tell with certainty whether an English word that has both a French and a Latin pattern is due to one or the other language. We may, however, assume that down to about 1500 the stock of *-ous* words is of French provenance. For *copious* 1387, the OED gives L *copiosus* as the etymon, but the pattern is perh. OF *copious* 1372. Similarly is *studious* 1349 prob. OF *estudieus*, not L *studiosus* (OED), and *fastidious* 1440 will

represent OF *fastidieus* (14th c., Bloch). *Fabulous* 1546, *generous* 1588, *sinuous* 1578 have both Latin and French patterns and may be adaptations of either or both. But *sulphurous* 1530 must be L *sulphurosus* as F *sulfureux* is first recorded 1718 (Bloch), and *blasphemous* 1531 is more prob. adapted L *blasphemus* than F *blasphemeus* (which is OF only).

4. 70. 9.   The sf *-ous* has come to be used for the adaptation of Latin adjs which did not fit a terminational pattern in English. It is not, however, enough to say that "in English this addition of the suffix has been greatly developed and has become the ordinary mode of anglicising L. adjs. of many kinds, esp. those in *-eus, -ius, -uus, -er, -ris, -ax/aci, -ox/oci, -endus, -ulus, -vorus, -orus*" (OED s.v. *-ous*). The problem is not merely phonetic, but has a semantic side to it, too. Why do we say *igneous*, but *Mediterranean*; *obvious*, but *Phrygian*; *hilarious*, but *lunar* etc.? We must bear in mind the particular semantic shade of *-ous*. With Latin adjs in which the termination is a sf denoting appurtenance (as is the case with the words mentioned immediately above), adaptation by *-ous* is out of the question. On the other hand, such adjs as *ambiguous, arduous, conscious, credulous, previous, prosperous, various* apparently convey no suggestion of 'remarkable, striking appearance'. In such cases the character of the sf is adaptational. No other sf was free for adaptational purposes: *-al, -ial, -an, -ian* denoted appurtenance and derived from nominal bases whereas adjs of the above kind are units for the speech feeling. For obvious reasons, sfs like *-ive* or *-ory* were quite impossible.

On the other hand, Latin had already paved the way for the extension of adjs by means of *-osus*. We have *dubius* CL and *dubiosus* LL, *querulus* CL and *querulosus* LL, *decorus* CL and *decorosus* LL, *contrarius* CL and *contrariosus* ML. The latter passed into OF, whence into ME where we find it as *contrarious* 1290. It was perhaps the first step toward the rendering of L *-ius* by E *-ious*. *Dubious* 1548 might be *dubius* as well as *dubiosus*. Other instances of *-ius* adaptations are *various* 1552, *obvious* 1586, *conscious* 1601, *pious* 1602, *abstemious* 1610, *previous* 1625.

4. 70. 10.   T. s o m n i f e r o u s for somnifer L: *odoriferous* 1425, *salutiferous* 1540, *somniferous* 1602, *fructiferous* 1622, *igniferous* 1618, *frugiferous* 1633, *luciferous* 1648, *herbiferous* 1656, *auriferous* 1727 and in imitation of these *vociferous* 1611, *soniferous* 1713, *argentiferous* 1801, *titaniferous* 'yielding titanium' 1828 for which there seem to be no recorded originals. Other exs with an actual or possible Latin pattern are *aeriferous* 1687, *argilliferous* 1800, *bacciferous* 1656, *carboniferous* 1799, *magnetiferous* 1832, *melliferous* 1656, *platiniferous* 1828, *spiniferous* 1656, *staminiferous* 1761, *stelliferous* 1583, *sudoriferous* 1597, chiefly scientific terms.

4. 70. 11.   T. s u p e r f l u o u s for L s u p e r f l u u s: *mellifluous* 1432, *superfluous* 1432; later come *ambiguous, assiduous, arduous, conspicuous, strenuous* (16th c.), *exiguous, lactifluous, contiguous* (17th c.). Obs. *monstruous* 1374 is OF *monstrueus*, L *monstruosus*.

4. 70. 12.   Other types are b a r b i g e r o u s for L b a r b i g e r (*barbigerous* 1631, *morigerous* 1600, *lentigerous* 1889), c a r n i v o r o u s for L c a r n i v o r u s (*carnivorous, granivorous, herbivorous, ossivorous, piscivorous* (17th c. and later), adapta-

tions of NL words with Greek material, as words in -ph a g o u s (*phytophagous,
sarcophagous, anthropophagous*), -ph i l o u s (*hygrophilous, dendrophilous*),
-ph o r o u s (*carpophorous, oophorous, phonophorous*), and some more. The sf
has never been appended to words in *-ific, -iform*.

4. 70. 13.   T. erroneous for L erroneus: Latin adjs in *-eus* (unless they
denote appurtenance to a proper name, in which case they become *-ean*, see
-an sf) show a tendency to be adapted into *ᴌeous*. The oldest instance I have
is *erroneous* 1400 (orig. chiefly spelt *-ious, -yous*). Other exs are MoE, as
sulphureous 1552, *igneous, ligneous, vitreous* (17th c.), *argenteous* 1881. *Aqueous*
1643 (L *aquosus*) has joined the group of words with a basis denoting material.
They have not, however, been mechanically adapted, but fit the character of
-ous in that they only mean 'resembling, like . . .', whereas the Latin words
also mean 'consisting of . . .'. Latin words in *-aneus* are represented by obs.
momentaneous, instantaneous, extraneous, contemporaneous (17th c.).

4. 70. 14.   Latin adjs in -a c e u s, derived from sbs in *-a*, all connected with
the subject-matter of biology, are adapted into -áceous, as *herbaceous,
testaceous, crustaceous, cretaceous, coriaceous, farinaceous, membranaceous* (all
17th c.), *avenaceous, fabaceous, rosaceous* (18th c.), In the terminology of Bot.
and Zool., some words in *-acea* (animals) and *-aceae* (plants) became established
as names of classes, orders, or families, and adjs in *-aceous* acquired a deriva-
tional connection with them. The alternations are of the type *crustacea/
crustaceous* [ešə/ešəs] resp. *rosaceae/rosaceous* [esɪə/ešəs].

4. 70. 15.   L adjs in -a x are anglicized in -ácious. By the side of CL *fallax*
there is a LL *fallaciosus* which passed into OF as *fallacious* (1327, Bloch). OF
audacious (1327, Bloch) has perhaps also an unrecorded Latin pattern. The
English words, however, are not recorded before the 16th c.: *fallacious* 1509,
audacious 1550. Their ambivalent character established the possibility of
forming other adjs in *-acious* to render L adjs in *-ax*. 17th c. words are *capacious,
contumacious, mendacious, pugnacious, loquacious, tenacious, vivacious, rapa-
cious, voracious*. More recent is *edacious* 1819. *Predacious* 1719 does not have a
Latin pattern, but is formed after *rapacious*.

4. 70. 16.   The termination -a c i o u s has jocularly been used in *obstinacious*
1830 and *splendacious* 1843 (the latter stem has been the source for various
attempts of a similar kind: obs. *splendidious* 1432, obs. *splendidous* 1605,
splendiferous 1843); *curvaceous* AE is not jocular, however.

4. 70. 17.   The pattern of *-acious* was followed by -ó c i o u s [ošəs] to render
L adjs in -o x. The use is not older than the 17th c. Exs are *ferocious, atrocious,
precocious* (17th c.).

4. 70. 18.   Some Latin adjs in -o r i u s which fitted the semantic shade 'out-
standing quality' were anglicized in -órious: *meritorious* 1432 'full of merit'
(orig. in a theological sense), *notorious* 1548 (after *famous*), *censorious* 1536
'addicted to censure, fault-finding'. But the usual adaptation of L *-orius* is
-orial or *-ory* (see the respective sfs).

4. 70. 19. Latin adjs in *-arius* are usually adapted in *-ary* or *-arian* (see the respective sfs). For reasons similar to the ones concerning *-orius*, a few adjs have coined the sf *-ous*: *contrarious* 1290 repr. OF *contrarious* which is ML *contrariosus*. Later are *temerarious*, *nefarious* (16th c.), *gregarious* 1688. All the words apply to striking quality or appearance. The group was joined by *hilarious* 1823, on semantic grounds (the Latin being *hilaris*). In *precarious* 1646 and *vicarious* 1637, however, the sf has obviously a merely adaptational function.

4. 70. 20. I give a list of adjs where *-ous* has an adaptational function, chiefly rendering L *-us*, but also L *-is*, Gr *-os*: *acclivous*, *garrulous*, *querulous* (or LL *querulosus*), *sonorous*, *decorous* (or LL *decorosus*), *raucous*, *grandiloquous*, *tremendous*, *stupendous*, all L *-us* / *lugubrious*, *illustrious* (L *-is*) / *atheous*, *analogous*, *acephalus*, *arthropodous*, *amphibious*, *blastocarpous*, *prognathous* and numerous other words belonging to natural history, repr. Greek adjs in *-os*, also latinized in *-us*.

4. 70. 21. In the terminology of chemistry, *-ous* is appended to names of elements, denoting a valence lower than that denoted by *-ic*, as in *chlorous*, *cuprous*, *ferrous*, *nitrous* etc. This use is a conscious revival of *-ous* as ultimately representing *-osus* denoting an abundant quality. But *-ous* is a quite independent formative here, the Latin words not ending in *-osus*. L *ferreus*, *ferrugineus*, *cupreus* etc. (also in more general use merely adapted as *ferreous*, *ferrugineous*, *cupreous*) were new-coined in English, on a NL basis of coining.

Adjs of a more general character, formed on a NL basis, are *sensuous*, *contemptuous*, *abdominous*, *multitudinous*, *platitudinous*, *stertorous*, *vulturous*, stressing outstanding quality or appearance.

4. 70. 22. In the nomenclature of zoology, adjs in *-ous* are formed from sbs of classification, as *amphibious* (f. *amphibia*), *struthious* (f. *struthio* 'ostrich'), *terricolous* (f. *terricolae* 'the class of earthworms') a.o. Here, the sf merely expresses the meaning 'belonging to the class of ...' The sf has the same character in the above mentioned derivative adjs from classification sbs in *-acea*, as *crustaceous* 'belonging to the class of Crustacea' etc. (zoology), *rosaceous* 'belonging to the Rosaceae' (botany).

4. 70. 23. Most Latin-coined adjs in - a c i o u s are matched by sbs in - a c i t y (except *efficacy*, *fallacy* and *contumacy*) as their derivatives on a NL basis of coining. Parallel are adjs in - o c i o u s (4. 70. 17) and their L derivatives in - o c i t y. Cp. also 4. 1. 27. On a native basis of coining both groups derive sbs in *-aciousness* resp. *-ociousness*.

4. 70. 24.   e d e m a / e d e m a t o u s. NL words of Greek origin in *-ema* (in E chiefly stressed on the penult), denoting abnormal states of tissue, derive adjs in *-ematous* ([ɛmətəs] or [imətəs]). Exs are *eczema*, *emphysema*, *erythema*, *exanthema* / *eczematous*, *emphysematous*, *erythematous*, *exanthematous*.

4. 70. 25.   c a r c i n o m a / c a r c i n o m a t o u s. NL words in *-óma* [omə], denoting a pathological cellular state, chiefly cancerous or tumerous, derive adjs in *-omatous* ([ɒmətəs] or [omətəs]). Exs are *enchondroma*/*enchondromatous*, *epithelioma*/*epitheliomatous*, *fibroma*/*fibromatous*, *glaucoma*/*glaucomatous* etc.

4. 70. 26. blasphemy/blasphemous. Many words in *-y*, being adapted NL words in *-ia* composed of Greek elements, derive adjs in *-ous* on the correlative basis *-y/-ous* (cp. *-y/-ic* 4. 43. 6—8). Exs of alternations are *analogy/analogous* (beside *-ic*), *homology/homologous* (esp. in chemistry, biology; also *homologic(al)*), *monotony/monotonous*, *synchrony/synchronous* (beside *-ic*, *-ial*), *cacophony/cacophonous*, *homophony/homophonous* (beside *-ic*; but *euphony* alternates with *-ic*, *-ical*, *-ious*), *-latry/-latrous* words, as *idolatry/idolatrous*, *monolatry/monolatrous*, *-phagy/-phagous* words as *andro-, anthropo-, mono-phagy/-phagous*, *-gyny/-gynous* words, chiefly used in botany and zoology, as *andro-, mono-, tetra-gyny/-gynous*, *-andry/-androus* words chiefly in botany and zoology, as *gyn-, tri-, poly-andry/-androus*.

We have the same alternation with a few loans from French, as in *adultery/adulterous*, *lechery/lecherous*, *treachery/treacherous*.

4. 70. 27. L *-osus* appears in form *-ose* only in latinisms, i.e. coinages on a NL basis. In rare cases such latinisms look analysable on a native basis, as in *globóse* f. *globe*, *gummóse* f. *gum* in BE, but they have been homologically actualized in AE where the stress is *glóbose*, *gúmmose*.

4. 71. 1. **-ship** /šɪp/

forms denominal sbs, chiefly from personal nouns, with the basic meaning 'state, condition'. The sf goes back to OE *-scipe*, *-scype* and has parallels in other Germanic languages. The root is the same as that of OE *scyppan* 'shape, G schaffen'.

4. 71. 2. From the OE period have survived the words earlship, *friendship*, *lordship*, *reeveship*, *township* (desubstantival), *worship* (OE *weorþscipe* = *worthship*) which is, however, a moneme for the present-day speaker. Survivals from the ME period are not numerous either: *fellowship* 1200, *ladyship* 1225, *workmanship* 1375 / *hardship* 1225 are the oldest words recorded while others are not older than the 15th c., as *captainship, heirship, keepership, neighborship, protectorship, wardship*. The majority of words in common use are 16th c. and after. Exs are *championship, clerkship, clientship, clownship, companionship, countship, deanship, dictatorship, doctorship, fathership, generalship, governorship, guardianship, justiceship, kinship, lectureship, majorship, matronship, membership, pastorship, primateship, queenship, rivalship, saintship, showmanship, sonship, squireship, statesmanship, studentship, tenantship, trusteeship, tutorship, twinship, vicarship, viziership*.

4. 71. 3. With personal sbs the sf conveys the abstract meaning 'state, condition of . . ., being . . .'. In a few cases the sf is added to an abstract sb, as in *clergyship, lectureship, kinship, courtship*, but the implication is that of the first group, as if the basis were *clergyman, lecturer, kinsman, courtier* resp. the agent sb *courter*. According to the character of the basis, the implication with sbs derived from personal sbs may also be 'office, dignity, rank of . . .', as in *ambassadorship, captainship, corporalship, majorship* etc., often including the connotation of the emoluments pertaining to the position, as in *fellowship, scholarship, headmastership, postmastership* a.o., in later use more often 'func-

tion, office', as in *trusteeship, editorship* (both 18th c.), 'position, role', as in *leadership* 1834, *dictatorship*, or 'institution, régime', as in *censorship, dictatorship*. In some derivatives from agent sbs the sense expressed is sometimes rather that of 'action', as in *censorship* 'supervision', *editorship* 'superintendence'. This is natural as an agent is connected with an underlying action (though a verb from the same stem as the agent sb may not be in existence). This is also the basis of the t. *workmanship* below, and of *courtship* 'courting'.

4. 71. 4.   *Ladyship, lordship, worship,* preceded by a possessive pronoun are used as respectful designations or forms of address. For *ladyship* the first record is from 1374 (Chaucer), for *lordship* from 1489, but used as a title, without a possessive pronoun, as early as Old English, then to render L *dominatio* (the title of an order of angels), for *worship* from 1548 (occasionally also without a pronoun). Cp. the use of other abstract sbs as titles, as *Majesty, Grace, Highness,* F *Altesse,* G *Hoheit* etc. This use has been imitated for the coining of many mock titles, as *clownship, curship, hagship, saintship, monkeyship* and many others. There are also occasional derivatives from groups, as Master of Artship. The group is one of the strongest in PE.

4. 71. 5.   When tacked on to a sb denoting a professional agent or the like, the cbs often have the connotation 'skill, art'. This sense group is MoE. Exs are *workmanship* 1529 H, *horsemanship* 1565, *scholarship* 1589 H, *coachmanship, craftsmanship, marksmanship, penmanship, showmanship, statesmanship*. This seems to be the only productive type today.

4. 71. 6.   Old English had several collective nouns, denoting a community, as *folcscipe, þēodscipe* 'nation', *hiwscipe* 'family'. Of the group, only *township*, OE *tūnscipe* 'the inhabitants of a town' has survived, and few words have been coined. *Fellowship* 'body of fellows' (in various senses) 1290 is obsolete or archaic now. In use are *partnership* 'firm', *membership, trusteeship* 'body of . . .'. It has recently produced countless words, partly humorous, such as *buymanship, salesmanship, groomsmanship, gamesmanship, lifemanship, brinkmanship* (the reader will find many words in Stephen Potter's books *Gamesmanship, Lifemanship* and others).

4. 71. 7.   Concrete senses have never much developed. OE had *wæterscipe* 'piece of water', in ME, *township* and *lordship* (the latter rare, last quoted 1578) joined the group. Modern is *waywodeship* 'province of a waywode'. With a different nuance we have *fellowship* and *scholarship* 'allowance of . . .'.

OE and ME formed derivatives from adjs and participial adjs also. The only survivals are *hardship* 'hard condition' 1225 and *worship* OE.

4. 72. 1.   -some /səm/

is OE *-sum* (= G *-sam*), from the same stem as *same*. It forms adjs from sbs, adjs and vbs, meaning '. . . like, characterized by . . ., apt to . . .'. The type has parallels in other Germanic languages.

4. 72. 2.   In OE, the majority of derivatives were denominal. No deverbal adj has survived into the ME period. Survivals of OE derivatives are *winsome* (f. OE *wyn* 'pleasure'), *lovesome, longsome*. The first is no longer analysable as

a derivative, as the root does not exist as a word in PE, the two others are archaic or dialectal now. The oldest recorded deverbal adj is *buxom* 1175 (f. stem of *būgan* 'bow'), a moneme for the PE speaker. The ME period was very productive. Exs are g a m e s o m e, *handsome* / *fulsome, gladsome, lightsome* (both 'merry' etc. and 'luminous', *loathsome, wholesome, wearisome* / *cumbersome, irksome, noisome* (f. apheretic *annoy*). Words recorded from the 16th c. are *burdensome, awesome* 'weird', *dangersome, dolesome* 'sorrowful', *healthsome, heartsome, laborsome, lifesome, quarrelsome, timorsome, toilsome, troublesome, toothsome* / *brightsome, darksome, ugglesome* (f. obs. *uggle* 'ugly') / *hindersome, tiresome*. Many of them are now dialectal or archaic. Many adjs recorded from the 17th c. belong to the semantic field of 'pleasure', as *frolicsome, gaysome, gleesome, humorsome, joysome* (rare), *laughsome* (rare), obs. *toysome* 'playful', *playsome*. To other fields belong *furthersome, venturesome, lonesome, meddlesome*. Later are *lithesome* 1768 (after *handsome*), its variant *lissom* 1800, *pranksome* 'frolicsome' 1810, *fearsome* 1768, *frightsome* 1817 (after *timorsome*), *bothersome* 1834, *plaguesome* 1828, *shuddersome* 1839, dial. *worrisome* 1869, *tempersome* 1875 'quick-tempered', *pestersome* 'bothersome' AE 1843, *wranglesome*' quarrelsome' 1817.

4. 72. 3.   The now prevailing shade of meaning is obvious from the 19th c. words (it is interesting to note the contrast between the 17th and the 19th c. coinages) though words in nonce-use or of regional occurrence occasionally have another character: *daresome* 1864 follows *frightsome* and *timorsome*, *tedioussome* 1824 is in keeping with the general 19th c. tendency, *frothsome* 1880 seems to be poet. Jespersen (VI. 25. 25) quotes *chucklesome* and *jumpsome*, the OED (s.v. *-some*) cites *clipsome, cuddlesome, dabblesome, divertsome*, in the ADD I find such words as *curioussome* 'curious', *gonesome* 'hungry', *queersome* 'queer', *retchsome* 'nauseating', *sweltersome* 'sweltering', *tellsome* 'talkative', *youthsome* 'youthful'.

The sf seems to have lost its productivity for deadjectival coinages while the deverbal type has grown in importance, the derivatives meaning 'apt to or apt to cause to . . .'.

4. 73.   Type t w o s o m e. The sf *-some* is found with a few cardinal numerals: *twosome* 1375 (chiefly Sc), *threesome* 1375 (Sc), *foursome* 15.., conveying the meaning '. . . together'. Historically it represents OE *sum*, the indef. pronoun, PE *some* "after numerals in the genitive plural . . . In ME. the inflexion disappeared, and the pronoun was finally treated as a suffix to the numeral" (OED s.v. *-some*, suffix[2]). Cp. such a passage as Beow. 207: *fiftēna sum* 'fifteen together'.

4. 74. 1.   -ster /stə(r)/[1]

goes back to OE *-estre* whose origin has been much disputed. According to Jespersen the suffix was originally neutral to the distinction of sex but denoted the male and the female actor indiscriminately. On the other hand, there is an

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[1] Jespersen MEG VI. 15. 1. 1. and Linguistica 420—429. — B. von Lindheim, Die weiblichen Genussuffixe im Altenglischen. Anglia 76 (1958), 479—504, esp. 494—504. (A very good description of the situation in Old English). — F. Kluge, Nominale Stammbildungslehre[3], Halle 1926, 25—27.

overwhelming number of OE words which apply to female agents, as has recently been pointed out by B. von Lindheim. This would rather seem to bear out Kluge's and the OED's view that the original function of OE -*estre* was to denote the female agent. Neither view can be exactly proved or disproved. As many occupations could be performed by both men and women, the suffix came to be neutral with regard to the expression of the concept of sex. This was the state of affairs as far back as OE. The productivity of the suffix in Old English seems to have been restricted to the southern dialects (von Lindheim). The history of the suffix during the ME period still needs clarification. In modern times, derivatives in -*ster* have only denoted male persons. At present it is impossible to tell how the change came about. Old and Middle English glossarists usually rendered Latin feminines by -*stre* words. *Spinster* (formerly also denoting a man) 1362 is the only survival of a feminine in StEnglish while *sewster* is Scotch. With the restriction of the sf in Modern English came a change of pattern for the formation of female agent substantives. It became possible to add the sf -*ess* when indication of sex was intended, as in *backstress* 1519 obs., *seamstress* 1613, *songstress* 1703.

4. 74. 2.   Exs are *seamster, webster, songster, tapster* (OE), *brewster, dempster* 'judge' = *doomster, dryster* 'one employed in drying something', *huckster, maltster* 'one who makes malt', *throwster* 'one who twists silk' (ME). From the 16th c. are recorded *gamester*, obs. *bangster* 'bully', *hackster* 'cut-throat, prostitute' (obs. or dial.), *whipster* 'wanton p.' (the root is not quite clear), *youngster, lewdster* (Sh). The 17th c. is unproductive: *deemster* 1611 is a variant of *dempster* and *doomster*. Most of the 16th c. coinages already had a depreciative character, and it is with this tinge that the majority of 18th and 19th c. words were formed, as *punster, trickster, dabster, rhymester* (all rec. from the first two decades of the 18th c.), *fibster, shyster, daubster, jokester, tipster* (after *gamester*), *ringster* 'member of an political ring' AE 1881, *gangster* 1896 (orig. U.S.), other recent words, most of them Americanisms such as *funster, crookster, prankster, mobster, dopester, boomster, bankster*. The taint of the sf is old, as we see, not due to *gangster*, as Jespersen says (VI. 15. 12). Very recent is AE *crimester* 'organized perpetrator of crimes', formed after *gangster*. The characteristic nuance of the sf is now that of 'shadiness'.

4. 74. 3.   Untainted words are *roadster* 1744, orig. applied to a ship, then also to a horse, a man, a vehicle, *oldster* (after *youngster*), *teamster* 1779 orig. 'man who drives a team', *bandster* 1794 'one who binds sheaves', *homester* 1891 'contestant in a match who belongs to the local team', the recent AE *pollster*. In recent AE there are several more words in -*ster* (see MeAL⁴ 178 and Spl I. 360) which are not current, however.

4. 74. 4.   *Lobster*, OE *lopustre, loppestre* is usually said to represent L *locusta*. This accounts neither for the sense nor for the form. *Barrister* 1545, today a moneme, may belong here, as derived from *bar*. One of the early spellings is *barrester*; but the spelling -*ester* in the 16th c. also occurs with *gangster, huckster* a.o. The form *barrister* is likewise recorded from the beginning, and has prevailed, perh. after *legister* and *sophister* (see sf -*ister* 4. 53).

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4. 74. 5. Derivatives have always chiefly been denominal. The OED (s.v. *-ster*) considers the sf a deverbal formative. But *seamster, webster, songster,* OE *lybbestre* (f. *lybb* 'poison') are denominal coinages. From the role of *-estre* as a frequent counterpart of deverbal *-er*, the sf acquired a deverbal character, too. MoE are predominantly denominal, in the main desubstantival. The derivation of *shyster* 'tricky lawyer' AE, however, is somewhat doubtful.

4. 75. -th /θ/

is a substantival sf with a few coinages of doubtful currency. Productive in OE and ME (*health, wealth, depth, strength, length* etc.), it has in the MoE period formed deverbal *growth* 1557 and *spilth* 1607. *Breadth* 1523 (no derivative for the present-day speech-feeling) is extended from now obs. *brede* (OE *brǣdu*), influenced by *length*, and was followed by *width* 1627 (dialectal *widness* with a change of suffix rather than 'a literary formation' (OED), as original [i:] had, by 1627, long become a diphthong. *Coolth* 1547 (now chiefly coll. or joc.) was coined after *warmth*. *Illth* 1860 is "used by and after Ruskin as the reverse of *wealth* in the sense of 'well-being': Ill-being" (OED). Horace Walpole coined the word *greenth*, and Wentworth quotes *lowth* as used by Bacon.

4. 76. -ton /tən/

has formed a few exocentric sbs with the basic meaning 'fool', as *skimmington* 1609 (the figure of an ill-used husband, prob. fr. *skim-*, as in *skimmed milk*), *simpleton* 1650, dial. *idleton* (with *-ton* in a merely individualizing function). The sf is parallel to *-by* (see there), and cbs of the kind arose in jocular imitation of place-names used as surnames, as *Middleton, Muggleton, Newton* (cp. Jespersen, Linguistica 417/418 and VI. 25. 43), but the particular circumstances which led to the choice of *-ton* and *-by* remain in the dark. On the other hand, the much newer word *singleton* 'one card in hand; one single thing (as distinct from a pair)' 1876 is of another kind than the preceding examples. It has attracted *doubleton* 'two cards' 1906.

4. 77. 1. -ure

is a weak sf which has formed several words, chiefly from stems ending in *-t* and *-s*. The oldest E words in *-ure* are loans from French, as *jointure* 1374, *pressure* 1382, *closure* 1386, *lecture* 1398 a.o. or Latin, as *mixture* 1460, *stricture* 1400, *structure* 1460 a.o. *Pressure* and *lecture* may represent both F *pressure, lecture* and L *pressura, lectura*, but the form of the English sf is French. After *closure*, English has formed *enclosure* 1538 which attracted *disposure* 1569, *composure* 1599, *exposure* 1606. *Pressure* was followed by obs. *expressure* 1598 and *impressure* 1600 (rare). *Mixture* attracted *fixture* 1598 and *prefixture* 1821. The loan *capture* 1541 (= L *captura*) attracted *rapture* 1600, *rupture* 1481 (L, F) gave rise to *disrupture* 1756, *jointure* was followed by *disjointure* 1757.

4. 77. 2. On the analogy of closure/close, *pressure/press* several deverbal coinages have been made from English verbs (in addition to the preceding ones in *-osure* and *-pressure*), as obs. *vomiture* 1598, obs. *praisure* 1622, obs.

raisure 1613, obs. *clefture* 1545, obs. *bankrupture* 1617 (after *rupture*), all short-lived words, *erasure* 1734. *Roundure* 'roundness' 1600 is poetic, *licensure* 'a licensing to preach' 1846 is AE only. *Departure* 1523 and *wafture* 1601 are the only common words of the group. *Failure* 1643 is fr. AF, i.e. Law French *failer* = F *faillir*, which has joined the spelling group of the sf.

4. 77. 3.   *Declinature* 'declination' etc. 1637—50 is Latin-coined **declinatura*. The word is analysable as *decline* plus *-ature*, but a suffixal type has not developed from it.

English borrowed *prefecture* 1577 (L or F), *prelature* 1607 (ML or F), *candidature* 1851 (F) so there is now a derivative relation between them and *prefect*, *prelate*, *candidate*, but no English coinings have sprung from the pattern.

On the analogy of *coverture* ME (OF), *disjuncture* 1400 (ML, OF), *rapture* analysed as adj plus *-ure*, English has coined *crenature* 1816; but this is as far as the type goes.

The loan *quadrature* 1553 (L) attracted *cubature* 1679. This latter and *curvature* 1603 (L) are analysable as *cube* resp. *curve* plus *-ature*; but again this has not led to coinings after the pattern.

4. 77. 4.   *Treasure* (= OF *tresor*) 1154, *leisure* (= OF *leisir*) 1300, and *pleasure* (= OF *plesir*, *plaisir*) 13.. had various forms of spelling before they definitely joined the spelling group of the sf. The reason for the spelling seems to be chiefly phonetic, i.e. the *-s* analogy of other words (*closure, censure, measure, pressure* etc.); see Jesp. I. 2. 735.

4. 77. 5.   Derivation in *-ure* from stems ending in [z] and [s] implies the phonological alternation [z/žər] resp. [s/šər]. The sf is otherwise pronounced [jə(r)] or, after *t*, [šə(r)].

4. 78. 1.   **-ward, -wards** /wə(r)d/, /wə(r)dz/

is a sf expressing direction toward ... Both forms were sfs as far back as OE. The stem is the same as we have in L *vertere* (cp. *Romam versus* 'Romeward') and G *-wärts* (*vorwärts* etc.). Cbs are formed on the following types: 1) **inward** (the first-word is a locative particle), 2) **northward** (the first-word is the name of a cardinal point), 3) **homeward** (the first-word is a common sb). All types are OE.

Exs are 1) *inward, outward, upward, onward, afterward, toward**. Adverbs of place which do not belong to the primitive group of locative particles, were originally prefixed with *a-*: *adūnweard* OE, *awayward* 1205, *abackward* 1205, but from about 1200 we find them without the prf: *downward* 1200, *backward* 1300, *wayward* 1380, *awkward* 1340 (obs. *awk* 'in a wrong direction, untoward'), *leftward* 1483.

2) *eastward, southward, westward, northward* OE, *north-westward* ME, *north-eastward* 1553 etc.

3) *homeward(s)* OE, *sideward* 1430. This use is chiefly 16th c. and later; and in PE the sf can be tacked on to practically any word. We find cbs such as *beautyward, chimneyward, doorward, earthward, godward, heavenward, lobbyward, landward, seaward*. However, these words are not in common use.

4. 78. 2. There is also the phrasal type 'to . . . w a r d' which goes back to OE. The type is commonly used with sbs, pronouns, and proper names down to the 17th c., but today cbs of the kind sound archaic. Exs are *to the westward*, *northward* etc. (Kipling, Wells), *to windward* (Hemingway), *to our country ward*, *to him ward, to London ward* (OED).

Combinations with locative particles have, on principle, always been both adjs and adverbs. On the other hand, the OE form *-weard* was already matched by the form *-weardes* which is purely adverbial. In PE, *-wards* is used when the action is qualified as to manner. By a sentence such as *the crayfish moves backwards* we refer to the manner of moving of the animal, and *write backwards* has a similar implication. We could hardly say *"Come *forwards!"* as mere direction is meant, in which case *-ward* is regularly used (see also OED s.v. *-wards*).

4. 79. 1. -y /ı/

is a sf which originally formed denominal adjs. It goes back to OE *-ig*, and the derivational type has counterparts in all Germanic languages. In OE there are only adjs derived from sbs meaning 'full of, characterized by . . .'. To the oldest stock belong such words as bloody, *cloudy, fenny* 'swampy', *foamy, guilty, hungry, icy, mighty, misty, moody, rainy, sandy, sappy, speedy, thirsty, watery, windy, witty, dizzy*, empty*, heavy*, holy*, pretty**. From the ME period are recorded such words as *angry, bunchy, cheesy, dungy, dusty, earthy, fatty, faulty, fiery, flamy, flowery, gemmy* 'abounding in gems', *gory* 'covered with gore', *gouty, hairy, hearty, juicy, lousy, milky, pearly, shadowy, stormy, wealthy, woody, naughty**. From later times date *bony, chilly, crazy, dirty, feathery, ferny, fishy, flaky, fleecy, foxy, frisky, fruity, fumy, gloomy, glossy, greasy, handy, healthy, heathery, jointy* 'having numerous joints', *knobby, leafy* 'abounding in leaves', *leathery, limy, lumpy* 'full of lumps', *mealy, moony* 'moon-shaped, stupidly dreaming', *mothy* 'infested by moths', *plaguy, pulpy, shady, shiny, steely, sunshiny* (16th c.), *choppy* 'full of cracks', *creamy, dampy, draughty, drizzly, filmy, flaxy, furry, grimy, locky, measly, nervy, nosy, nutty, pasty, rickety, silky, soapy, spleeny, stringy* (17th c.), *dressy, edgy, flawy, fringy, funny, glazy, hummocky, humpy, ledgy, meaty, patchy, pillowy, shingly, tindery, wispy* (18th c.), *cheeky, classy* 'superior' sl, *cushiony, fluffy, fluty, goosey, gossipy, jerky, jungly, lacy, lardy, loopy, messy, mousy* 'quiet; infested by mice', *newsy, plucky, pockety, risky, spidery, summery* (19th c.), *arty* 1901, *matey* 'sociable' 1915, *sexy* 1928. The preceding list is only a selection. There are infinitely more derivatives as the type is very productive.

4. 79. 2. Deverbal derivatives have occured since the 13th c., but are not frequent before the MoE period. In the Ancren Riwle are found *slibbri, sliddri, sluggi, slummi, droopy*, in Chaucer *wieldy* 'agile', *sleepy* 'soporific'. The following are recorded later: choky, *crumbly, nippy, drowsy, slippy* (16th c.), *floaty, spewy*, a term of agriculture, *sweepy* (17th c.), *clingy, creepy, fidgety, peery, shaky, shattery, shivery, sticky, sulky* (18th c.), *blowy, crawly, creaky, croaky, dashy, floppy, laughy, loppy, mopy, perky, poky, raspy, scattery, snappy, splashy, squeaky, straggly, stretchy, swimmy* 'inclined to dizziness', *tottery, weepy, wriggly* a.o. (19th c.), *squiggly, wiggly* (20th c.).

4. 79. 3.   The meaning of desubstantival derivatives is 'full of, abounding in, covered with, like . . .'. Beginning with the 18th c., the sf has shown a tendency to form words of a colloquial, slangy character. This slangy tendency has grown exceedingly since the 19th c. which accounts for such words as *arty*, *beery, catty, churchy, nosy* 'who pokes his nose into other people's concerns', *piggy, panicky, oniony, fishy* 'improbable', *shady* 'disreputable', *dodgy, potty* = *dotty* = *balmy* = *nutty* = *dippy* 'crazy' etc. *Horsy* and *doggy* have developed the sense 'addicted to . . .', recorded since about 1850. The meaning perh. originated in connection with races. Otherwise, the sf is rarely tacked on to names of animals. With personal sbs, the sf is not used at all.

The meaning of deverbal adjs is 'having a tendency to, given to, inclined to . . .'. The colloquial or slangy tendency characterizes them as well as the desubstantival derivatives. Cp. recent *batty* 'crazy' 1922.

4. 79. 4.   Although derivation from adjs is Indo-European (see Wi 345), there are no English words before about 1400. Exs are *moisty* 1386, *crispy* 1398, obs. *leany* 14.., obs. *hugy* 1420. From the 16th c. are recorded *haughty**, *fainty* (now poet. or dial.), *blacky, whity, greeny, paly, dusky, vasty*, later are *bleaky, lanky* (17th c.), *pinky, purply* (18th c.), *goody* 1810, *bluey* 1802. The sense conveyed is 'somewhat, suggesting . . .'. The type is weak, *-ish* being the stronger rival of the sf. *Slippery* 1535 is adapted from the now dial. *slipper* (OE *slipor*).

4. 79. 5.   There are comparatively few derivatives which have more than two syllables, and there are no derivatives from other than everyday words. This is probably one of the reasons for the development of the colloquial and slangy character of *-y* words. Derivation from composites is uncommon. Jespersen (VI. 13. 32) has nonce-words such as *moon-beamy, goosefleshy, headachy, open-airy, other-worldy* a.o.

4. 79. 6.   *Busy* OE and *lazy* 1549 are of unascertained etymology. The verb *laze* 1592 is backderived from the adjective. For the phonological alternations of the fricatives in *worthy/worth, scurvy/scurf, lousy/louse* see 4. 1. 22—23.

4. 79. 7.   -sy /sɪ/

The sf *-y* has a by-form *-sy*. The sf may have originated in cases of *-y* tacked on to a plural (as in *tricksy* fr. *tricks*) or a word ending in *-s* (as *bousy* fr. *bouse* vb), but it may also be simply playful (cp. dimin. -sie ,4. 45. 4). Exs are *bousy* 1529, tricksy 1552, *tipsy* 1577 (perh. fr. *tip* in *tipple*, i.e. a variant of *tap*), perhaps *pudsy* 'plump', the AE words *woodsy, backwoodsy, folksy, bitsy. Flimsy* 1702 is unexplained. It may contain the same symbolic element as we have in *flim-flam* (the OED thinks of derivation from *film*). *Limpsy* 1825 is in BE a playful derivative from *limp*, while in AE it is synonymous with *flimsy. Slimsy* 1845 'flimsy, frail' is a blend of *flimsy* and *sl* (as in *slump, slip;* there is app. no connection with *slim*). The common denominator of *flimsy, limpsy, slimsy* is 'frail, without strength'. *Clumsy* 1598 appears to be derived from obs. vb *clumse* 1360 'be or become stiff with cold'. *Drowsy* 1530 is unexplained; it may be a blend of *droopy* and *bousy* (cp. the first quotation for *bousy* in the OED from Skelton: *Droupy and drowsy, Scuruy and lousy; Her face all bowsy*). *Frowsy* 1681 also is of uncertain etymology.

4. 79. 8.   **-ety, -ity, -dy, -ty** /ɪtɪ, dɪ, tɪ/

The adjectival sf *-y* has a by-form in *-ety, -ity, -dy, -ty* which is used in popular speech and slang. The ADD quotes such words as *biggity, biggety* 'conceited' (the only instance of an extended simple adj, as far as I can see), *mingledy* 'mingled', *scaredy-cat* 'timid person', *wrinkledy* 'wrinkled', *raggedy, raggety* 'ragged', *jaggedy* 'jagged', *snickety = persnickety = pernickety, shackletty = shackledy = shackly, rickety, ramshacklety, wadgetty* 'fidgety' (blend of *waddle* and *fidgety*), *mizzlety* 'drizzling', *stripety* 'striped', *itchety* 'uneasy', *streakity-strikety, wibblety-wobblety* 'unsteady', *fratchety* 'irritable' (fr. vb *fratch*).

The extended sf, as we see, is added to verbal stems, but is very often merely a variant of the second ptc. When tacked on to a nominal stem, it appears to be a variant of the possessive adj (*ragged, jagged*), i.e. the *-ed* and the *-y* form are blended. Scotch forms, in which StE and StAE *-ed* appears as *-it* (*sleekit* 'sleeked', *strippit* 'striped'), may have influenced or caused the rise of the sf. Jespersen (VI. 25. 29) supposes that *-ety* derives from adjs where it is genuine, as *rickety, snippety*. We may add *fidgety* 1730 and *crotchety* 1825. *Pernickety* 1808 'cranky, crotchety, fussy' is orig. a Sc. word, but its etymology is uncertain. It fits into the group semantically, however, as the words all denote some striking shape or appearance, chiefly with a disparaging tinge. On the other hand, we have the same *di* or *ti*, if I am not mistaken, in old playful rime combinations as *higgledy-piggledy, hoity-toity, humpty-dumpty, hobbledehoy, hoberdidance, hobidy-booby, flibbertigibbet* (16th and 17th c.), *clipperty-clapper, tippety-tap, flipperty-flopperty, jiggety-joggety, lickety-split, clickety-click, clackety-clack, bumpety-bump, uppity-up, nippity-tuck* 'a narrow escape', *cripplety-crumplety, crinklety-cranklety* etc. where the extension is by no means clear. Perhaps there is at the root of the extension a symbolic character of [dɪ], [tɪ], the one underlying *ding-dong, tick-tack* (see 7. 41; 7. 45).

SEMI-SUFFIXES

4. 80. 1.   By this term I understand such elements as stand midway between full words and suffixes. Some of them are used only as second-words of cpds, though their word character is still clearly recognizable.

4. 80. 2.   -like /laɪk/

is the adj (in adverbial formations the adv) *like*, so cbs with *like* are originally adjectival cpds of the type *headstrong*. *Like* as a semi-sf is isolated from the full word in that we can form cbs of the type *unmanlike* which would be impossible if *-like* were still a full word. Cbs with *-like* have the meaning 'like, resembling, having the form or appearance of, befitting . . .'. Cbs are practically ad libitum. Exs are m a n l i k e, *apelike, beastlike, godlike, gentlemanlike, kinglike, ladylike, snakelike, tigerlike* etc. etc. Ad hoc cbs often take a hyphen, as *bagpipe-like, drone-like, heaven-like, lawn-like, statesman-like* a.o.

The earliest exs (as quoted in the OED) date from the 15th c.: *circlelike* 1420, *chieftainlike* 1470, *devillike* 1470. From the 16th c. are recorded *bishoplike, godlike, fleshlike*. The first instance of a cb with a proper name is *Dardanaple-like* 1607, but the type is now quite common.

From the 16th c. we find cbs of the type used as adverbs. The use is now 'obsolete or at least archaistic' (OED). Early exs are *bishoplike, fellowlike, gentlemanlike, phraselike*.

The type u n m a n l i k e is recorded from the second half of the 16th c. Exs are *ungospellike* 1574, *unmanlike* 1579, *unwarlike* 1590, *ungentlemanlike* 1592, *unchristianlike* 1610, and later *unworkmanlike, unseamanlike, unsportsmanlike, unstatesmanlike, unlifelike, unloverlike, unladylike, unsummerlike, unbusinesslike*.

Less common in StE (exc. Sc.) are cbs with adjs, as b o l d - l i k e, *genteellike, grim-like, human-like, innocent-like, old-like*. Very early is *such-like* 1422, in form *swilk-like* 1400. The type is very productive in colloquial and esp. in vulgar speech where it is also tacked on to phrases such as *out of her mind like, in a hurry like* (see Jesp. VI. 23. 12).

4. 80. 3.   -worthy /wɜ(r)ðɪ/

The case of *-worthy* is similar to that of *-like* in that both are adjs historically. Though many cbs have been formed since the OE period (s. OED s.v. *-worthy*), only a few have gained real currency: *blameworthy* 1387, *noteworthy, praiseworthy* (16th c.), *seaworthy, trustworthy, newsworthy* (19th c.). Since the 19th c., negative adjs have been in use, but only *unseaworthy* 1820, *untrustworthy* 1846, and *unpraiseworthy* 1876 occur. *Newsworthy* is recent.

The semi-suffixal character of *-like* and *-worthy* is made apparent by the fact that adjs which they form can be prefixed by *un-*. Compound adjs cannot be prefixed (cp. 3. 63. 10).

4. 80. 4.   -monger /mʌŋɡə(r)/

is OE *mangere*, agent sb fom *mangian* 'trade', as in *cheesemonger, fishmonger, ironmonger*. From the 16th c. on *-monger* has been used for the coining of disparaging words only. The use appears to have started in the ecclesiastical sphere with words such as w h o r e m o n g e r 1526 (Tindale's translation of *fornicator*, Eph. 5. 5), *meritmonger* 1552 (Latimer, Sermons), *pardonmonger* 1570, *holy watermonger* 1550. Later exs are *fashionmonger, moneymonger, newsmonger, prophecymonger, panicmonger, scandalmonger, scaremonger, versemonger*, and *warmonger*, a favorite propaganda word in recent years. In independent use *monger* is now rather uncommon.

4. 80. 5.   -way, -ways /we/, /wez/

is an adverbial suffix with the meaning 'in the ... way, wise, manner', 'in the direction of ...'. The origin of these suffix formations are compounds with *way* for a second-word, *-ways* representing the genitive. Most words occur in either form, but the *-s* word is more usual. The *-way* words may be used as adjectives while those in *-ways* are adverbs only.

The only word that goes back to OE is *alway* (*ealne weg*). The rest are EME and later.

The types are: 1) a n y w a y(s), 2) l o n g w a y(s), 3) s i d e w a y(s). The two first are dead now; new combinations are possible only on type 3). Most words have parallel formations in *-wise*.

t. a n y w a y(s) (= pronoun as first-word): *otherways* (12th c. *oðres weges*), *always, noways* (= *alles weis, nanes weis* early 13th c., in present-day form 14th c.), o. *everyways* 1398, *someway, anyways*, o. *likeways* 16th c.;

t. l o n g w a y(s) (= adjective as first-word): beg. 16th c.: *straightway* (as two words 15th c.), *longways*, o. *likeways, broadway*;

t. s i d e w a y(s): beg. 16th c., with the exception of *needways* 'necessarily' (1300): *edgeway, endway, crossways, lengthways, sideways, sunway, breadthways, sternways*.

4. 80. 6.   -wise /waɪz/

with the meaning 'in the form, manner, or the like of ...', forms adverbs and is, like *-ways*, orig. an independent word, the same as we have in archaic phrases such as 'in no wise', 'in like wise', 'on this wise', 'in gentle wise'.

The types are: 1) ótherwìse, 2) doúblewìse, 3) clóckwìse. Type 1) is dead, type 2) is also practically dead, only occasional coinages occur today. Type 3) however, is strong.

The origin is to be sought in prepositional combinations: OE *on scipwisan* 'in the manner of a ship', 'like a ship', *on crosse wyse* 1377. These combinations are still possible, as *in pilgrim wise*. From ME on, combinations without a preposition occur: *crosswise* 1398, *cornerwise* 1474.

t. otherwise: *such-wise, what-wise, nowise, thuswise*;

t. doublewise: *double-wise* c 1386, *likewise*, obs. *diverswise, longwise, leastwise* 1534, *roundwise* 1577, *squarewise* 1545, *thwartwise* 1589, *humble-wise* 1592, *hooked-wise* 1635, *teetotalwise* 1866, *despiteful-wise* 1903;

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t. c l o c k w i s e : *cornerwise, crosswise, coastwise, endwise, lengthwise, heartwise, sidewise, balloon-wise, festoon-wise, snakewise.*

The formations may also be used as adjectives: *a cornerwise cloakroom.*

4. 80. 7.   *Way* and *wise* are full words, so it might be objected that cbs with them are cpds. This is correct. But the cbs are never substantival cpds as their substantival basis would require; they are only used as subjuncts or adjuncts. Moreover, *wise* is being used less and less as an independent word and may, as a semi-sf, one day come to reach the state of F *-ment* (and its equivalents in other Romance languages) fr. L *mente*, ablative of *mens* 'spirit, character', later 'manner'. As for *-way* and *-ways*, the former has never been strong and is no longer productive, anyway. The form *-ways* does not seem to be used for new formations either (for the latest word listed above, *sternways* 1872, the OED has only one instance, s.v. *stern*). In the sense 'in the direction of . . .', *-ward* has proved the stronger formative, whereas for other nuances *-wise* is preferred.

-wise itself is somewhat rivaled by *fashion* which is, however, much weaker. Exs of this use, which is traced back to the 17th c. in OED (s.v. *fashion* 13 c) are *arrow-fashion, baby-fashion, ham-fashion, rabbit-fashion* etc.

4. 80. 8.   Two other words may be mentioned which are only alive as second elements of composites, though both appear to be unproductive now. *Wort* 'plant' (as in *banewort, colewort, liverwort*) has not been in ordinary use as an independent word after 1650 (see OED). *Wright* 'constructive workman' survives in compounds such as *cartwright, wheelwright, shipwright, playwright,* but the independent word has not been in standard use for a long time.

V. DERIVATION BY A ZERO-MORPHEME[1]

The term 'zero-derivation'

5. 1. 1.   Derivation without a derivative morpheme occurs in English as well as in other languages. Its characteristic is that a certain stem is used for the formation of a categorically different word without a derivative element being added. In synchronic terminology, we have syntagmas whose determinatum is not expressed in the significant (form). The significate (content) is represented in the syntagma but zero marked (i.e. it has no counterpart in form): *loan* vb is '(make a) *loan*', *look* sb is '(act, instance of) look(ing)'. As the nominal and verbal forms which occur most frequently have no endings and (a factor which seems to have played a part in the coining of the term 'conversion' by Kruisinga) are those in which nouns and verbs are recorded in dictionaries, such words as *loan, look* may come to be considered as 'converted' nouns or verbs. It has become customary to speak of the 'conversion' of substantives, adjectives, and verbs. The term 'conversion' has been used for various things. Kruisinga himself speaks of conversion whenever a word takes on a function which is not its basic one, as the use of an adjective as a primary (*the poor, the British, shreds of pink, at his best*). He includes quotation words (*his "I don't know's"*) and the type *stone wall* (i.e. substantives used as preadjuncts, cf. 2. 1. 12). One is reminded of Bally's 'transposition'. Koziol follows Kruisinga's treatment, and Biese adopts the same method. Our standpoint is different. The foregoing examples illustrate nothing but syntactic patterns. That *poor* (preceded by the definite article, restricted to the plural, with no plural morpheme added) can function as a primary, or that *government,* as in *government job,* can be used as a preadjunct, is a purely syntactic matter. At the most we could say, with regard to *the poor,* that an inflectional morpheme is understood but zero marked. However, inflectional morphemes have a predominantly functional character while the addition of lexical content is of secondary importance. As for *government job,* the syntactic use of a primary as a preadjunct is regularly unmarked, so no zero morpheme can be claimed. On the other hand, in *government-al, -al* adds lexical content, be it ever so little: 'pertaining to, characterizing government'. Therefore *governmental* is a

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[1] V. Bladin, Studies on Denominative Verbs in English, Uppsala diss. 1911. — A. Hertrampf, Die Entstehung von Substantiven aus Verben im Neuenglischen. Breslau diss. 1932. — U. Lindelöf, English Verb-Adverb Groups Converted into Verbs. Helsingfors 1937. — Carl Bergener, A contribution to the study of the Conversion of Adjectives into Nouns in English. Lund diss. 1928. — R. Tourbier, Das Adverb als attributives Adjektiv im Neuenglischen. Berlin diss. 1928. — Y. M. Biese, Origin and Development of Conversions in English. Annales Academiae Scientiarum Fennicae. B XLV. 2. Helsinki 1941. — Donald W. Lee, Functional Change in Early English. Menasha, Wisc. George Banta Publ. Company 1948 (Columbia diss. 1948).

syntagma while *government* (*job*) is not. That the phrase *far-off* can be used as a preadjunct (the subject of R. Tourbier's dissertation) is again a syntactic matter. Characterized adverbs do not develop such functions in any case. We will not, therefore, use the term conversion. As a matter of fact, nothing is converted, but certain stems are used for the derivation of lexical syntagmas, with the determinatum assuming a zero form. For similar reasons, the term 'functional change' is infelicitous. The word itself does not enter another functional category, which becomes quite evident when we consider the inflected forms.

Derivations dealt with in the book

5. 1. 2.   The derivational patterns which will be treated in this chapter are: *loan* vb f. *loan* sb (desubstantival verbs), *idle* vb f. *idle* adj (deadjectival verbs), *out* vb f. *out* ptc (verbs derived from particles), *look* sb f. *look* vb (deverbal substantives). Cf. also 2. 34—38.

Endings and derivation

5. 1. 3.   In inflected languages, the derivant and the derivative usually have a characteristic nominal or verbal ending. But, as we have said before (4. 1. 2—3), endings are not derivative morphemes. When English was still a more amply inflected language, the present types existed, but inflectional differences were more in evidence. Cf. the OE verbs *bisceopian*, *fugelian*, *gamenian*, *hearmian*; *frēon* (*frēogian*), *grēnian* and their respective bases *bisceop*, *fugol*, *gamen*, *hearm*; *frēo*, *grēne*. The question of the subsequent leveling of forms and the weakening of endings has little bearing on our subject. The reader is referred to Jesp. MEG I. 6. 1—3; 2. 425 and two articles by Samuel Moore[1]. With regard to denominal derivation, however, it is interesting to note that the leveling of endings brought about the loss of distinction in ME between the OE conjugations in *-an* and *-ian*. By the ME period, there is only one conjugational type. The *-an* of *ryht-an* as well as the *-ian* of *lōc-ian* resulted in *-en*. This reduced the number of patterns for denominal verbs to one.

Derivational connection between verbs and nouns

5. 1. 4.   With respect to both denominal verbs (type *loan* vb f. *loan* sb) and deverbal substantives (type *look* sb f. *look* vb) we see that as early as Old English a derivational connection existed between the present-infinitive stem of weak verbs on the one hand and the stem of nouns on the other. As for deverbal substantives, there was some competition in the early stages of the language. Like other Germanic languages, Old English had strong verbs that were connected with substantives containing an ablaut vowel of the verb (*rīdan / rād, bindan / bend, beran / bora*). However, this derivational type was unproductive so far back as Old English. The present-infinitive stem of strong verbs came to be felt to represent the derivative basis for deverbal sub-

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[1]) Loss of final *n* in Inflectional Syllables in Middle English, Language 3 (1927) 232—59; Earliest Morphological Changes in Middle English, Language 4 (1928), 238—66.

stantives in exactly the same way as did the corresponding stem of weak verbs: *ride* vb: *ride* sb = *look* vb: *look* sb. But this contention of Biese's needs qualification: "these facts indicate the resistance showed by strong verbs to the process of converting them into nouns before, owing to the introduction of weak inflections, a distinct idea of a universal verb-stem had been developed" (407). Many of the verbs that derived substantives at an early date have either never had weak forms or the weak forms are rare or later than the substantives. Verbs such as *bite, dwell, fall, feel, fold, freeze, have, grind, hide, make, steal, tread* are cases in point. This goes to show that the existence of weak verb forms is incidental to the rise of a derivational connection between the present-infinitive stem of strong verbs and the stem of the substantive.

This derivational connection is partly due to cases where a strong verb and a substantive of the same root existed in OE and where phonetic development resulted in closely resembling forms for both in ME. OE *fær, faru* was *fare* by the end of the 12th century while the corresponding OE verb *faran* had reached the stage of *faren* or *fare* about the same time. Other examples of pairs are *bīdan* 'stay' / *bīd* 'delay, dwelling place', *bindan* 'bind' / *bind* 'band, tie', *drincan* 'drink' / *drinc, drinca* 'drink', *flēotan* 'float' / *flēot* 'place where water flows', *helpan* 'help' / *help*, *hrēowan* 'rue' / *hrēow* 'rue', *slǣpan, slēpan* 'sleep' / *slǣp, slēp* 'sleep', *steorfan* 'die' / *steorfa* 'pestilence, mortality', *stingan* 'sting' / *sting*, *stæppan* 'step' / *stæpe*, *stīgan* 'ascend' / *stīg* 'path', *gieldan* 'yield' / *gield*. The derivational relations as I have described them were fully established around 1200.

Zero-Derivation as a 'specifically English' process

5.1.5.   It is usually assumed that the loss of endings gave rise to derivation by a zero morpheme. Jespersen (GS⁹, §§ 168—171) gives a somewhat too simplifying picture of its rise and development. "As a great many native nouns and verbs had ... come to be identical in form ..., as the same things happened with numerous originally French words ..., it was quite natural that the speech-instinct should take it as a matter of course that whenever the need of a verb arose, it might be formed without any derivative ending from the corresponding substantive" (p. 153). He calls the process "specifically English" (p. 152). As a matter of fact, derivation by a zero morpheme is neither specifically English nor does it start, as Jespersen's presentation would make it appear, when most endings had disappeared. Biese's study shows quite clearly that it began to develop on a larger scale at the beginning of the 13th century, i.e. at a time when final verbal -*n* had not yet been dropped, when the plural ending of the present was not yet -*en* or zero, and when the great influx of French loan words had not yet started. I do not think that the weakening of the inflectional system has anything to do with the problem of zero derivation. Stems are immediate elements for the speaker who is aware of the syntagmatic character of an inflected form. He therefore has no trouble in connecting verbal and nominal stems provided they occur in sufficiently numerous pairs to establish a derivational pattern. In Latin which is a highly inflected language, denominal verbs are numerous: *corona/coronare, catena/ catenare, lacrima/lacrimare; cumulus/cumulare, locus/locare, truncus/truncare;*

nomen, nomin-/nominare, semen, semin-/seminare, stercus, stercor-/stercorare;
liber/liberare, sacer/sacrare, aequus/aequare (examples from Juret 158). In Modern
Spanish where we have full sets of verbal endings (though in the declension
only gender and number are expressed) both types of zero-derivation are very
productive. The weakening of the inflectional system in English, therefore, can-
not have much to do with the development of zero-derivation.

5. 1. 6.   On the other hand, it cannot be denied that despite the relative
productivity of corresponding derivational types in other languages, the
derivative range of the English patterns, esp. that of denominal verbs, is still
greater. The explanation of this seems to be that English, unlike Latin, French,
Spanish, or German, never had any competitive types. So, whenever a der-
ivation was made from nouns, it followed the one pattern that existed, i.e.
derivation by a zero morpheme. The only derivative morphemes PE has for
denominal verbs are *-ate, -ize, -ify*. They have restricted range of derivative
force: *-ate* is latinizing and learned, *-ify* is learned while *-ize* is chiefly technical.
All three derive almost exclusively on a Latin morphologic basis. The suffixal
type *dark-en* (4. 28) was not originally a deadjectival pattern; in any case, it
would have and has to a certain extent rivaled the type *idle* vb f. *idle* adj
only. Derivation by a zero morpheme, esp. the type *loan* vb f. *loan* sb, must
therefore be considered the norm and is quite naturally very strong in English.
In German, there are many competitive types. We have both mutated and
unmutated verbs (*faul-en, härt-en, draht-en, häut-en*). There are also denominal
verbs with a derivative morpheme (*stein-ig-en, rein-ig-en*; with a foreign
morpheme *telefon-ier-en, lack-ier-en, stolz-ier-en*). In addition, German makes
use of the prefixes *be-, er-, ver-*. Such types as *ver-rohen, ver-jüng-en, vergrös-*
ser-n; *er-kalt-en, er-gänz-en*; *er-leichter-n*; *be-end-ig-en, be-herz-ig-en, ver-eid-*
ig-en have no counterparts in English. English *be-* has never played a serious
role in denominal derivation (see 3. 8. 6—8). Nor has the type *em-bed* ever
become productive to any larger extent. The productivity of the type *loan*
vb f. *loan* sb seems to be thus reasonably accounted for. The deverbal type
look sb f. *look* vb has been less prolific and is partly bound up with certain
syntactic patterns of grouping (see 5. 6. 5—6). For this, we do have com-
petitive patterns. There are the suffixal types *arriv-al, break-age, guid-ance,*
improve-ment, organiz-ation and the verbal substantive type *writ-ing* though
the latter has now chiefly the functional role of deriving action nouns proper.
This is the reason why so many zero-derivatives from verbs of Latin and
French origin, coined during the 15th and 16th centuries, were subsequently
replaced by suffixal derivatives in *-al, -age, -ance, -ment* (cf. also Hertrampf's lists
of about 200 words, p. 38—39). "After 1650 the suffix formations have complete-
ly gained the upper hand of the direct conversions of the disyllabic and tri-
syllabic words derived from French and Latin verbs" (Biese 239).

Zero-derivation with loan-words

5. 1. 7.   As for Latin and French words and derivation from them, there are
comparatively few derivatives before 1300 (see Biese 299 ff.). French words
were for some time felt to be foreign elements and were not 'converted' with

the same ease as native stems were. The phenomenon is in no way different from the one we observe with derivation by suffixes. Loan words remain strangers for a time, and it usually takes some time before a derivational type is applied to a heterogeneous class of words. Zero-derivation was facilitated by the co-existence of borrowed sbs and vbs, as *anchor* sb a 880 (= L) / *anchor* vb c 1230 (the OED has doubts, but F *ancrer* is recorded in the 12th c., see Bloch), *annoy* sb 1230/*annoy* vb 1250, *accord* sb 1297/vb 1123, *account* sb 1260/vb 1303, *arm* sb 1297/vb 1205, *array* sb 1300/vb 1297, *bar* sb 1175/vb 1300, *blame* sb 1230/vb 1200, *change* sb 1225/vb 1230, *charge* sb 1225/vb 1297, *charm* sb 1300/vb 1300, *chase* sb 1297/vb 1300, *claim* sb 1300/vb 1300, *comfort* sb 1225/vb 1290, *cost* sb 1297/vb 1320, *counsel* sb 1295/vb 1290, *count* sb 1325/vb 1325, *cry* sb 1275/vb 1225, *dance* sb 1300/vb 1300, *double* adj 1225/vb 1290, *doubt* sb 1225/vb 1225, *form* sb 1225/vb 1297, *haste* sb 1300/vb 1300, *lodge* sb 1290/vb 1225, *order* sb 1225/vb 1240, *poison* sb 1230/vb 13.., *portion* sb 1300/vb 1330, *rage* sb 1297/vb 1300, *ransom* sb 1225/vb 1300, *reign* sb 1272/vb 1297, *rime* sb 1200/vb 1290, *rule* sb 1225/vb 1225, *touch* sb 1297/vb 1297, *trouble* sb 1230/vb 1225, *vow* sb 1290/vb 1300.

5. 1. 8.   There are quite a few vbs with French roots for which no French verbs are recorded and which may accordingly be treated as zero derivatives: *feeble* vb 1225/adj 1175, *hardy* vb 1225/adj 1225, *master* vb 1225/sb a 1000, *poor* vb 1275/adj 1200, *saint* vb 1225/sb 1175. On the other hand, the sb *grant* 1225 may be derived from the verb *grant* 1225. It is only after 1300 that the process of zero-derivation is as firmly rooted with French as with native words. Though French originals for later English words may occur, it is just as safe to consider them as derivatives, as *centre* vb 1610 fr. *centre* sb 1374, *combat* vb 1564 fr. *combat* sb 1567 (or the reverse), *guard* vb 1500 fr. *guard* sb 1426 and others.

5. 1. 9.   Words of Scandinavian origin were more easily incorporated than French words, and derivation occurs as early as the 13th c.: *trist* 'trust', *bloom, boon* 'ask as a boon, pray for', *brod* 'shoot, sprout', *smithy* 'make into a smithy' a.o. (see Biese 242).

I will now illustrate the various types.

5. 2. 1.   Type **loan** vb fr. **loan** sb (desubstantival vbs)

Many PE vbs go back to OE: *answer* (*andswaru/andswarian*), *bed* 'prepare a bed' (*bed/beddian*), obs. *bliss* 'rejoice' (*blīðs/blīðsian*), *book*, orig. 'furnish with a book' (*bōc/bōcian*), *blossom* (*blōstm/blōstmian*), *bridge*, orig. 'make a bridge' (*brycg/brycgian*), *bridle* (*brīdel/brīdlian*), *bode* (*boda* 'messenger'/*bodian* 'announce'), *borrow* (*borg* 'pledge'/*borgian*), *care* (*caru/carian*), *calve* (*cealf/cealfian*), *chare, char* 'turn' (*cerr, cierr/cierran*), obs. *churl* 'take a husband' (*ceorl/ceorlian*), *claw* (*clāwu/clāwian*), *cloth, clothe* (*clāð/clāþian*), obs. *cheap* 'trade' (*cēap/cēapian*), *curse* (*curs/cursian*), *deal* (*dǣl/dǣlan*), *dye* (*dēag/dēagian*), *ebb* (*ebba/ebbian*), *end* (*ende/endian*), *fathom* (*fæþm/fæðmian*), *fear* (*fǣr/fǣran*), *fan* 'winnow' (*fann/fannian*), *fish* (*fisc/fiscian*), *fire* (*fȳr/fȳrian*), *fold* 'make sheepfolds' (*falod, fald/faldian*), *fight* (*feohte, feoht, gefeoht/feohtan*), *fowl*, orig. 'catch fowl' (*fugel, fugol/fug(e)lian*), *harm* (*hearm/hearmian*), *heap* (*hēap/*

hēapian), *heat* (*hǣtu, hǣto/hǣtan*), *harp* (*hearpe/hearpian*) *hasp* (*hæpse/hæpsian*), *handle* (*handle/handlian*), *hoard* (*hord/hordian*), *hire* (*hȳr/hȳrian*), *helm*, orig. 'cover with a helm' (*helm/helmian*), *horse* (*hors/horsian* 1100), *house* (*hūs/hūsian*), *hue* 'form', later 'color' (*hiw/hiwian*), *hedge* 'surround with a hedge' (*hegge/hegegian*), *inn* (*inn/innian* 1100), *knee* (*cnēow/cnēowian*), *love* (*lufu/lufian*), *lose* (*los* 'loss'/*losian*), *list* 'listen' (*hlyst/hlystan*), *mark* (*mearc/mearcian*), *martyr* (*martyr/martyrian*), *milk* (*milc, meolc/milcian, meolcian*), *mist* (*mist, mistian*), *monk* 'orig. make a monk of' (*munuc/munecian*), *man* (*man/mannian* 1122), *need* (*nīed/niedan*), (*name*:*nama/genamian*), *nail* (*nægel, nægl/næglan*), obs. *path* (*pæþ/pæþþan*), *pepper* (*pipor/piporian*), *pine* 'torment' (*pin* 1154/*pīnian* 893), *plant* (*plante/plantian*), *plight* (*pliht/plihtan*), *psalm* (*sealm/sealmian*), *rain* (*regn/regnian*), dial. *ridder* 'riddle, sift' (*hrider, hridder/hridrian*), *rest* (*ræst, rest/ræstan, restan*), *shame* (*sceamu/sceamian*), *salt* (*sealt/sealtan*), *saddle* (*sadol/sadolian*), *sail* (*seg(e)l/seglian*), *salve* 'anoint' (*sealf/sealfian*), *shoe* (*scōh/scōgan*), *ship* (*scip/scipian*), *shadow* (*sceado*, obl. *scead(u)we/sceadwian*), *smoke* (*smoca/smocian*), *smear* (*smeru/smierwan*), *smith* (*smiþ/smiþian*), *sorrow* (*sorh, sorg/sorgian*), *spell* 'talk' (*spel/spellian*), *speed* (*spēd, spǣd/spēdan*), *tap* (*tæppa/tæppian*), *tale* 'reckon' (*talu/talian*), *thank* (*þanc/þancian*), *timber* (*timber/timbran, timbrian*), *thieve* (*þēof/þēofian*), *threat* 'threaten' (*þrēat/þrēatnian*), *thunder* (*þunor/þunrian*), *token* (*tācen, tācn/tācnian*), *tide* 'happen' (*tīd/tīdan*), obs. *trendle* (*trendel* 'circle'/*atrendlian*), *ward* (*weard/weardian*), *water* (*wæter/wæt(e)rian*), *weed* (*wēod/wēodian*), *whistle* (*hwistle/hwistlian*), *will* (*willa/willian*), *wound* (*wund/wundian*), *wonder* (*wundor/wundrian*), *wed* 'pledge' etc. (*wed/weddian*), *weapon* (*wǣpen/wǣpnian*), *wive* (*wīf/wīfian*) *yoke* (*geoc/geocian*).

5. 2. 2.   The following date from the 13th c. (the indications in parentheses refer to the respective sb; when no indication is given, the sb is OE): *bill* 'strike with the bill, peck', *blaze* 'burn', *belt* 'gird with a belt', obs. *child* 'give birth', *cripple* 'walk lamely', *den* 'hide in a den', *dust* 'be dusty', *file, flower* (1225), *friend* 'gain friends for', *fine* 'put a fine on' (1200), *fodder* 'give f.', *fist* 'fight with the fists', *ground* 'bring to the g.', *gleam, hook* 'bend', *head* 'take off the h.', *kern* 'form grains', *knight, leech* 'heal', *loan* (1240), *lid* 'put lid on', *lord* 'be lord', *land* 'bring to land' (OE = *lendan*), *lock* 'fasten with a lock' (OE = *lūcan*), *master, mouse* 'catch mice', *mouth* 'speak', *nest* (OE = *nistian*), *pride* 'adorn proudly', *prison* 'put in p.' (1123), *riddle* 'pass corn through a riddle' (1100), *rust, rope* 'fasten', *stone, smithy* 'make into a smithy' (1300), *stream, saw* 'cut with a saw', *son* 'have a son', *shrine* 'enclose relics in a s.', *shroud* 'clothe', *snow* (OE *snīwan*), *thrall, truth* 'believe', *whelp* 'bring forth whelps', *word* 'speak', *wheel, wimple* 'veil' (1100), *witness*.

5. 2. 3.   Later are recorded (reference in parentheses is to the sb) *angle* 'fish' (OE), *back* (OE), *balm* (ME), *barrel* (ME), *brain* 'smash the brains' (OE), *bran* (ME), *bribe* (ME), *butter* (OE), *cap* (OE), *cart* (ME), *castle* (OE), *chapter* (ME), *charter* (ME), *coffer* (ME), *cradle* (OE), *experiment* (ME), *farm* (ME), *fellowship* (ME), *finger* (OE), *garner* (ME), *grass* (OE), *halter* 'fasten' (OE), *horn* (OE), *hull* 'remove the hull' (OE), *kitten* (ME), *lamb* (OE), *leaven* (ME), *malt* (OE), *market* (EME), *marshal* (ME), *mire* 'plunge in a m.' (ME), *moss* (ME), *muzzle* (ME), *neck* 'strike the neck' (OE), *night* (OE), *oil* (ME), *perl* (ME), *picture* (ME),

piece (ME), *pit* 'cart into a pit' (OE), *plank* (ME), *plate* (ME), *plow, plough* (OE), *plague* (ME), *priest* (OE), *promise* (ME), *prose* (ME), *ridge* (OE), *rivet* (ME), *robe* (ME), *root* (EME), *sack* (OE), *sauce* 'season' (ME), *scale* (ME), *screen* (ME), *shoulder* (OE), *shovel* (OE), *side* (OE), *silver* (OE), *sponge* (OE), *spot* (ME), *story* (ME), *streak* (OE), *summer* (OE), *table* (ME), *thong* (OE), *tin* (OE), *veil* (ME), *winter* (OE), all before 1500.

5. 2. 4. *angle* 'run into a corner' (ME), *balance* (ME), *butcher* (ME), *cipher* (ME), *cloister* (ME), *coffin* (ME), *collar* (ME), *colt* 'run wild as a colt' (OE), *fancy* (1465), *fin* (OE), *gesture* (ME), *girdle* (OE), *glove* (OE), *gossip* (OE), *grade* (1511), *husk* (ME), *kennel* (ME), *knob* (ME), *ladle* (OE), *latch* (ME), *launder* (ME), *lecture* (ME), *libel* (ME), *loaf* 'form a loaf' (OE), *message* (ME), *mask* (1534), *mill* (OE), *moan* (ME), *mother* (OE), *neighbor* (OE), *nickname* (1440), *nurse* (ME), *nose* (OE), *park* (ME), *patch* (ME), *pattern* (ME), *pawn* (1496), *phrase* (1530), *pig* (ME), *pinion* (ME), *place* (ME), *pole* (ME), *police* (1530), *pulley* (ME), *puppy* (1486), *quilt* (ME), *rafter* (OE), *riddle* 'speak in riddles' (OE), *roost* (OE), *sample* (ME), *scabbard* (ME), *scar* (ME), *school* (OE), *screw* (ME), *scythe* (OE), *sheaf* (OE), *shell* (OE), *shop* (ME), *shower* (OE), *skin* (ME), *slave* (ME), *speck* (OE), *star* (OE), *stomach* 'be offended' (ME), *style* (ME), *sun* (OE), *team* (OE), *tent* (ME), *torture* (1540), *trumpet* (ME), *umpire* (ME), *usher* (ME), *vision* (ME), all 16th c.

5. 2. 5. *anvil* (OE), *bastinado* (1577), *blanket* (ME), *burrow* (ME), *casket* (1467), *crutch* (OE), *evidence* (ME), *fissure* (ME), *gangrene* (1543), *gipsy* (1537), *hand* (OE), *harbinger* (ME), *hinge* (ME), *hint* (1604), *jewel* (ME), *kerchief* (ME), *label* (ME), *lacquer* (1579), *lamp* (ME), *laurel* (ME), *leaf* (OE), *leg* (ME), *lip* (OE), *manufacture* (1567), *mast* (OE), *model* (1575), *moon* (OE), *oar* (OE), *paw* (ME), *pillory* (ME), *pilot* (1530), *pinnacle* (ME), *pulp* (1563), *puncture* (ME), *race* 'run' (ME), *rival* (1577), *serenade* (1649), *shaft* (ME), *skirt* (ME), *soldier* (ME), *stilt* (ME), *strand* (OE), *supper* (ME), *tail* (ME), *tincture* (ME), *tub* (ME), all 17th c.

5. 2. 6. *badger* (1523), *bayonet* (1692), *buckram* (ME), *capture* (1541), *chaperon* (ME), *chum* (1684), *diamond* (ME), *dinner* (ME), *flannel* (1503), *guarantee* (1679), *knuckle* (ME), *lantern* (ME), *mob* (1688), *nerve* (ME), *onion* (ME), *partition* (ME), *pioneer* (1523), *putty* (1633), *queue* (1592), *raft* (ME), *shepherd* (OE), *stocking* (1583), *strap* (1573), *tour* (ME), all 18th c.

kerb (1664), *kite* (OE), *knife* (ME), *loot* (1839), *monkey* (1530), *placard* (1481), *portage* (ME), *room* (OE), *schedule* (ME), *scrimmage* (1470), *segment* (1570), *shin* (OE), *signal* (ME), *skunk* (1634), *tablet* (ME), *torpedo* (1520), *truck* (1611), *trustee* (1647), *vacation* (ME), *wolf* 'eat like a wolf' (OE), 19th c., *major* 1927.

It would be difficult to give a complete list of derivatives as there is an ever growing tendency to derive verbs from sbs without derivative morphemes. A few recent verbs are *service, contact* (1929), *audition, debut, package, chairman, page, date* (1928), *process* (1945), *waitress* (1946, see ASp 21 (1946) 304), *pressure* (not in OED or Spl.), *feature* (rec., as in *the play features*). Mencken (AL⁴, 195 and Spl. I. 382ff.) gives many more, most of which are, however, hardly used.

5. 2. 7.   It is likewise useless to try a classification according to sense-groups, as there is no class-denoting formative. The vb may denote almost any verbal action connected with the basis of the underlying sb. The vb *bed* has or has had the meanings 'spread a bed' (obs.), 'put to bed' (with various implications), 'go to bed', 'lodge' (obs.), 'sleep with', and there are more technical meanings. Bladin had already pointed out that "every action or occurrence can be designated by a verb derived from the very noun the idea of which most easily enters the mind of the person wanting to state a fact" (57), and if Jespersen says that "it is difficult to give a general definition of the sense-relation between substantives and de-substantival verbs" (VI. 6. 71), this is rather an understatement. We may recognize certain groups, as 'put in . . .', 'furnish, cover, affect with . . .', but it should be noted that each of these senses is only one of the many which the same verb has or may have. Biese, therefore, makes no attempt at classification, and he is certainly right in doing so. It may, however, be worthy of note that the privative sense as in *dust* 'remove the dust (from)' is frequent only with technical terms denoting various kinds of dressing or cleaning. Exs are *bur wool* or *cotton, burl cloth, bark, rind, poll, pollard trees, bone, fin, gill, gut, scale fish, flesh hide, stone fruit, worm plants, skin animals, shell, husk, hull corn, shuck nuts, corn* (AE), *weed a garden.* For more exs see Bladin 160—162.

The meaning of a certain vb is clear in a certain speech situation. That *brain* means 'smash the b.', *colt* 'run wild as a colt', *halter* 'fasten with a h.', *harp* 'play the h.', *leaf* 'develop leaves', *mire* 'plunge in a mire', *mob* 'attack, crowd', *mouse* 'catch mice', *pulley* 'raise with a pulley', *raft* 'transport by raft', *stilt* 'walk on stilts', *stomach* 'be offended', *strand* 'drive ashore', *sun* 'expose to the sun', *can* 'preserve in cans', *winter* 'pass the winter', *vacation* 'make a vacation', *audition* 'grant an audition' etc. is a result of given circumstances which establish the bridge of understanding between the speaker and the person or persons spoken to.

5. 2. 8.   There are derivatives from proper names, as *boycott* 1880 (orig. spelt with a capital, from the name of Captain Boycott who was first boycotted), *Shanghay* 1871 'drug and press on board a vessel', *Zeppelin* 1916 'bomb from a zeppelin' (also clipped = *zep*), and the obsolete verbs *Copenhagen* 1810 DA, *Burgoyne* 1777 DA, *Cornwallis* 1799 DA.

5. 2. 9.   Some verbs often occur in the *-ing* sb only (originally or chiefly), while finite verb forms or infinitives are not or rarely used, as *hornpiping* 'dancing a hornpipe' (no vb rec.), *slimming, slumming, orcharding* 'cultivation of fruit trees' (no vb rec.), *moonlighting* 'illicit action by night', *blackberrying* 'the gathering of blackberries' (no vb rec.), *ducking* 'the shooting of ducks' (the vb has quite different meanings). *Dialling* 'the art of constructing dials', *speeching, auctioneering, buccaneering, electioneering, engineering, parliamenteering, privateering, volunteering* are the original forms. Converted cpds with *-monger* for a second-word are current only in the *-ing* form (*merit-mongering, money-mongering* etc.). *Innings* is not matched by any other vb form, nor are *cocking* 'cock-fighting', *hopping* 'hop-picking', *sniping* 'snipe-shooting', *moonshining* 'illicit distilling' AE and others.

For another aspect of direct *-ing* derivation from sbs, see sf *-ing.*

5.3. Type **idle** vb fr. **idle** adj (deadjectival verbs)

To the OE period go back *bare, bitter, busy, cool, dizzy, dry, dusk, even, fair, fat, foul, glad* arch., *green, idle* (in modern use rec. since 1592), *light, narrow, open, right, stark* 'become stiff', *still, thin, white, yellow* (obs. *blake, bright, dead, dreary, strong, old, short, good, great*).

From the period between about 1150 and 1200 are recorded obs. *sick* 'suffer illness', *soft, low* (obs. *meek, hory, hale*).

The following date from the period between about 1200 and 1300 (Biese has included the Cursor Mundi in this period): *black, lame, brown, loose, slight, thwart, better, dim, blind* (obs. *hardy, certain, rich, wide, broad, dumb, less*).

From the 14th c. are recorded *tame, treble, ready, clear, fine, smooth, sour, crisp, grey, sore, pale, faint, full, dull, round, sober, humble, gentle, English, supple, tender, perfect, blunt, calm* (obs. *able, hasty, sound, weak, unable, honest, noble, bawdy*).

From the 15th c. we have *purple, scant, stale, clean, hollow, perplex,* from the 16th c. *obscure, shallow, frisk, slack, slow, quiet, empty, bloody, plump* 'make plump', *lavish, fit, mellow, nimble, equal, dirty, idle, russet, secure, spruce, parallel* (and many other now obs. words, see Biese 130—149).

The 17th c. coined *crimson, muddy, numb, giddy, worst, blue, lower, gallant, brisk, shy, concave, virulent, tense, ridicule, unfit, ruddy* (and many now obs. words, see Biese 149—163).

From the 18th c. are recorded *net* 'gain as a net sum' 1758, *total* (once 1716, then 1859), *negative, grizzle, northern* (said of landscape), *invalid* 'enter on the sick-list', *sombre, queer* 'cheat' sl, *picturesque,* from the 19th c. *desperate* 'drive desperate', *convex, stubborn, tidy, sly* 'move in a stealthy manner', *callous, chirk* 'make cheerful' (AE), *gross* 'make a gross profit' 1884, *commonplace, western* 'decline in the west (said of the sun)', *guttural* 'utter in g. tones', *tenfold, best, southern* (said of the wind), *opaque, proof, dense, aeriform, true.*

From our century there are such words as *pretty, wise, lethal, big* (vg, E. Caldwell).

Usually, deadjectival vbs denote change of state, and the meaning is either 'become . . .' or 'make . . .'. Intransitive vbs with meaning 'be . . .' (as *idle, sly, equal*) form quite a small group. Some vbs have a comparative or a superlative as root: *better, best, worst,* perhaps *lower.* See also sf *-en.*

5.4.1. Type **out** vb fr. **out** pt (verbs derived from locative particles)

Derivation from locative particles is less common than the preceding types (in German, such derivation is more common, though chiefly in prefixal cbs: *begegnen, entgegnen, erwidern, anwidern, äußern, veräußern, erinnern* etc.). In OE there are *yppan, fremman* (with *i*-mutation from *ūp, fram*), *framian, forþian, ūtian.* Later are *over* 'to master' 1456, obs. *under* 'cast down' 1502, *off* 'put off' 1642, *down* 1778, *nigh* 'draw near' 1200, *thwart* 1250, *west* 'move towards the west' 1381, *south* 1725, *north* 1866, *east* 1858.

These words, however, are not very common (except *out* and *thwart*).

5. 4. 2.   Type **hail** vb fr. **hail** int (verbs derived from minor particles)

Derivation from exclamations and interjections (most of them onomato-poeias) is more frequent. It will, however, be noted that many of these con-versions have undergone functional and formal changes only without acquiring a well-grounded lexical existence, their meaning merely being 'say . . ., utter the sound . . .'. Exs are *hail* 1200, *nay* 'say nay, refuse' 13.., *mum* 1399, *hem* 1470, obs. *hust, hosht* 'reduce to silence' etc., *tush, yea, soho, whoo* (16th c.), *shoo, pooh, humph* (17th c.), *encore, gee-hup* (to a horse), *pshaw, hoicks, yoho, hal-loa, yaw* 'speak affectedly', *hurrah* (18th c.), *tally-ho* (fox-hunting term), *boo, yes, heigh-ho* 'sigh', *bravo, tut, bow-wow, haw-haw, boo-hoo* 'weep noisily' etc. (see Biese 178—214, also Jesp. VI. 6. 92/93).

The meaning 'say . . .' may occur with other words also when they are used as exclamations or interjections, as with *iffing* (other verb forms are not recorded), *hence* 'order hence' (obs., 1580). And we may reckon here all the words of the type *sir* 'call sir'.

From about 1600 on, geminated forms also occur as verbs. A few have been mentioned in the foregoing paragraph; others are snip-snap (1593), *dingle-dangle, ding-dong, pit-pat* (17th c.), *pitter-patter, tick-tick, hurry-scurry, shilly-shally, dilly-dally, wiggle-waggle* (18th c.), *criss-cross, rap-tap, wig-wag* (19th c.) etc.

The limits of verbal derivation

5. 5.   Derivation from suffixed nouns is uncommon. Biese's treatment of the subject suffers from a lack of discrimination. He has about 600 examples of substantives and adjectives; but the 'suffixes' are mere terminations. Words such as *herring, pudding, nothing, worship* are not derivatives. The terminations *-ace, -ice, -ogue, -y* (as in *enemy*) have never had any derivative force.

Theoretically it would seem that the case of a suffixal composite such as *boyhood* is not different from that of a full compound such as *spotlight*. But obviously the fact that suffixes are categorizers generally prevents suffixal derivatives from becoming the determinants of pseudo-compound verbs. There are very few that are in common use, such as *waitress* (rec.), *package* (rec., chief-ly in form *packaged, packaging*), *manifold* OE (obsolescent today), *forward* 1596, *referee* 1889, such adjs as *dirty, muddy*. Many more are recorded in OED (as *countess, patroness, squiress, traitress* 'play the . . .', *fellowship, kingdom* a.o.).

Another reason seems to be still more important. Many of the nominal suffixes derive sbs from vbs, and it would be contrary to reason to form such verbs as *arrival, guidance, improvement, organization* when *arrive, guide, improve, organize* exist. Similar considerations apply to deadjectival deriva-tives like *freedom* or *idleness*. The verb *disrupture* is recorded in OED (though only in participial forms) but it is not common. *Reverence* is used as a verb, but it is much older (13.., sb 1290) than the verb *revere* (1661). It should also be noted that the alternation *revere/reverence* shows characteristics of vowel change and stress which are irregular with derivation by means of *-ance, -ence*. For the same reason *reference* is not a regular derivative from *refer*, which facilitated the coinage *reference* 'provide with references' etc. 1884.

There are no verbal derivatives from prefixed words either. The verb *unfit* 'make unfit' 1611 is isolated.

5. 6. 1.   Type **look** sb fr. **look** vb (deverbal sbs)

Deverbal sbs are much less numerous than denominal verbs. The frequency-relation between the two types has been approximately the same in all periods of the language. An exception is to be made for the second half of the 13th c. "when the absolute number of conversion-substantives is larger than that of the verbs formed from substantives" (Biese, p. 34).

From the 13th c. are recorded (unless otherwise mentioned in parentheses, the resp. verbs are OE) *dread* (*ondrǣdan* 1175), *grind, have, look, smite, steal, weep, ail, stink, crow* (before the cock's crow), *break, call* (1225), *crack* 'noise', *dwell, groan, heed, hide, make, mislike, mourn, quake, rot, shift, shove, show, slake* 'act of slacking', *spit* 'spittle', *stint, wax, wrest* 'act of twisting' a.o.

5. 6. 2.   From the later ME period are recorded (indications in parentheses refer to the respective verbs) *ail* (OE), *aim* (ME), *fall* (OE), *feel* (OE), *frame* (OE), *hit* (ME), *hunt* (OE), *keep* (OE), *knock* (OE), *lift* (ME), *move* (ME), *nap* (OE), *pinch* (ME), *pluck* (ME), *put* (ME), *run* (OE), *shoot* (OE), *sink* (OE), *snatch* (ME), *sob* (ME), *treat* (ME), *walk* (OE), *wash* (OE).

From the 16th c. date *bleat* (OE), *blemish* (ME), *craze* (ME), *crinkle* (ME), *croak* (ME), *glide* (OE), *gloom* (ME), *grasp* (ME), *grope* (OE), *hiss* (ME), *knit* (OE), *launch* (ME), *purge* (ME), *push* (ME), *rave* (ME), *say* (OE), *scowl* (ME), *scratch* (ME), *scream* (ME), *shine* (OE), *simper* (1563), *slur* 1598 (1594), *snub* (ME), *soak* (OE), *split* 1597 (1590), *stretch* (OE), *stumble* (ME), *swim* (OE), *wave* (OE); from the 17th c. *contest* (1579), *converse* (ME), *grin* (OE), *grumble* (1586), *hitch* (1440), *laugh* (OE), *produce* (1499), *quote* (ME), *scud* (1532), *shear* (OE), *shudder* (ME), *shuffle* (1532), *sip* (ME), *sneeze* (1493), *snort* (ME), *stroke* (OE), *struggle* (ME), *take* (ME), *yawn* (OE); from the 18th c. *bid* (OE), *finish* (ME), *growl* (ME), *hang* (OE), *prance* (ME), *prod* (1535), *pry* (ME), *ride* (OE), *rip* (1477), *saunter* (1475), *scan* (ME), *sit* (OE), *whimper* (1513). From the 19th c. we have 1891 *assist* (1514), *fix* (ME), *quote* (1387), *meet* (OE), *melt* (OE), *mince* 'minced meat' (ME), *muddle* (1596), *shampoo* (1762), *shimmer* (OE), *shunt* (ME), *spill* (OE), *spin* (OE), *tickle* (ME).

5. 6. 3.   As for the meaning of deverbal sb, the majority denote the act or rather a specific instance of what the verbal idea expresses (*assist, bleat, blemish, quote, contest, fall, fix, growl, hiss, hunt, knock, lift, nap* etc. etc.; the term 'action-noun' which Hertrampf and Biese use is therefore not good). This has been so from the beginning (see Hertrampf and Biese). "The abstract nouns, including nouns of action, are not only the most common type of conversion-substantives; they are also those of the greatest importance during the early periods of the development of conversions" (Biese 308). "The conversion-substantives used in a personal or concrete sense are, especially in the earlier stages, of comparatively slight importance" (ib.).

Concrete senses show *mince* 'minced meat', *produce* 'product', *rattle* 'instrument', *sprout* 'branch', *shoot* 'branch', *shear* 'shorn animal', *sink* 'sewer', *clip* 'instrument', *cut* 'passage, opening', *spit* 'spittle', *stride* 'one of a flight of steps'.

Sbs denoting the result of the verbal action are *catch, take, fang, win* 'victory', *cut* 'provision', *find, pinch* (of snuff), *melt* 'melted substance', *slur* 'slurred

sound', *snatch* 'excerpt from a song', *burn* 'mark', *suck* 'mother's milk', *sweat, think* 'opinion', *tread* 'footprint' etc.

Place-denoting are *fold, bend, stip, wash* 'sandbank', *dump* etc.

5. 6. 4.   Sbs denoting the impersonal agent are *draw* 'attraction', *hitch* 'fastener', *catch* (of a gate, a catching question etc.), *stick* 'something that causes delay', *sting* 'animal organ', *tread* 'part of the sole that touches the ground', *sell, do, hoax, take-in,* all 'tricky contrivance', *wipe* 'handkerchief' sl etc.

There are also a number of sbs denoting a person. OE knew the type *boda* 'bode' (corresponding to L *scriba*, OHG *sprecho*) which in ME was replaced by the type *hunter* (for a parallel development in German since the MHG period see Wi 151). Several words survived, however, as *bode, help* (OE *help*), *hunt* (the last quotation in OED is from 1807), and we have occasional ME formations, as *ally* 1380 (if it is not rather French *allié*); *spy* 1250 is OF *espie*, but could be apprehended as formed after the type. Obs. *cut* (a term of abuse) 1490 does not seem to have any connection with the vb *cut*, and *scold* 'scolding woman' 1200 is doubtful, the vb is first quoted 1377.

The word *wright*, which now occurs only as a second-word of cpds (*cart-wright* etc.) is no longer apprehended as an agent noun (belonging to *work*). Otherwise all deverbal sbs denoting a personal agent are of Modern English origin, 16th c. or more recent. The type probably came into existence under the influence of the types *pickpocket* and *runabout*. Exs are *cheat* 1532, *sneak* 1643, obs. *stroll* 'stroller' 1623, *tramp* 1664, *romp* 'child or woman fond of romping' 1706, *flirt* 1732, *crack* 'cracksman' 1749 (thieves' sl), *soak* 'drunkard, tippler' 1820 H, *bore* 'tiresome p.' 1812, *sweep* 'chimney sweeper' 1812, *pry* 'prying person' 1845, *tease* 1852, *trot* 'toddling child' 1854, *have* and *have-not* 1836, *beat* 'unprincipled sponger' 1877, *gouge* 'imposter' A sl 1877, *coach* 'tutor, trainer' 1848 (misleadingly classed in OED, as if from sb *coach*), *flunk* 'student who flunks a class', *squirt* 'fop' etc., *discard* 'discarded person'. The great number of depreciative terms is striking.

For the sake of convenience I repeat here the examples of such personal deverbal sbs as form the second-words of cpds: *upstart* 1555, *by-blow* 1595 = obs. *by-slip* 1670 'bastard', *chimney-sweep* 1614, *money-grub* 1768, *shoeblack* and *bootblack* 1778, *new-come* 'new arrival' 1577, *bellhop, carhop* rec.

5. 6. 5.   The formation of deverbal sbs may be considered from the angle of syntactical grouping. No doubt there are different frequency-rates for a word according to the position which it has in a sentence. Biese has devoted a chapter (XIII, pp. 282—302) to the question and has established various types of grouping which have influenced the growth of the type. We see that deverbal sbs frequently occur in prepositional groups (*to be in the know*), that they are often the object of *give, make, have, take* (less so of other verbs), that only 11% of the exs show the deverbal sbs as subject of the sentence and that they are frequently preceded by adjuncts. The most important patterns are '(*be*) *in the know*' and '(*have*) *a look*'. Exs of the first type are phrases such as *in a daze, in the long run, on the wane, on the wax, upon the go, with a jerk, with a thrust of his hair, after this sit, after this slovenly win, for a tell, for the kill, for the draw, of English make, at one sling, at a gulp, get into a scrape* etc. (see Biese 294—298 for early instances and a statistical survey).

5. 6. 6.   As for the t. '(*have*) *a look*', "the use of phrasal verbs with conversion-substantives may be said to be a very marked feature during all periods from early ME up to the present time. As shown by our quotations, the origins of this use may be said to go back as far as the OE period" (Biese 301). Exs are: *have a wash, a smoke, a swim, a chat* etc., *give a laugh, a cry, a break, a toss, a whistle, the slip, the chuck, the go-by* etc., *take a ride, a walk, a swim, a read, the lead* etc., *make a move, a dive, a bolt, a bow* etc. etc.

5. 6. 7.   It will be interesting to compare zero-derivatives with the *-ing* sbs. Historically speaking there is no longer a competition so far as the formation of common sbs is concerned. The number of new-formed *-ing* sbs has been steadily decreasing since the beginning of the MoE period. According to Biese the figures for newly introduced *-ing* sbs, as compared with zero-derivatives of the same verbs, are as follows: 13th c. = 62, 14th c. = 80, 15th c. = 19, 16th c. = 12, 17th c. = 5, 18th c. = 2, 19th c. = 0. Biese has obviously considered the rise of new *forms* only, but not the semantic development of *-ing* sbs. Otherwise his figures would have been different (see *-ing* sf). Any verb may derive an *-ing* sb which can take the definite article. The *-ing* then invariably denotes the action of the verb: *the smoking of the gentlemen disturbed me*. The zero-derivative, as compared with the *-ing*, never denotes the action but gives the verbal idea in a nominalized form, i.e. the notional content of the verbal idea (with the secondary implication of the idea 'act'): *the gentlemen withdrew for a smoke*. "In their use with phrasal verbs *-ing* forms have become obsolete, whereas there is an ever increasing number of conversion substantives used in conjunction with verbs like *make, take* etc. . . ." (Biese 310). On the other hand, common sbs in *-ing* are now chiefly denominal, denoting something concrete, chiefly material (see *-ing* sf), which eliminates *-ing* as a rival for zero-derivatives. According to Biese (312) this distinction is already visible in the early stages of conversion. Biese points out that a prepositional cb following a sb is almost always a 'genitivus subjectivus' (*the grind of wheels*), whereas the same type of group following an *-ing* sb is most often a 'genitivus objectivus' (*the arizing of bodye*, 314/315) which is certainly an observation to the point, as it shows the verbal character of the *-ing* sbs as compared with the more nominal character of zero-derivatives.

A few instances of semantically differentiated derivatives are *bother/bothering, breed/breeding, build/building, proceeds/proceedings, meet/meeting, set/setting, turn/turning, bend/bending, find/finding, sit/sitting, clip/clipping, cut/cutting, feel/feeling, paint/painting*.

5. 6. 8.   Sometimes deverbal substantives are only idiomatic in the plural: *it gives me the creeps* (*the jumps*), *turn on the weeps* A sl, *have the prowls* A sl, *the bends* 'caisson disease', *for keeps* 'for good'.

5. 6. 9.   For reasons similar to those discussed in 5. 5. there are no nominal derivatives from suffixed verbs. An apparent exception are derivatives from expressive verbs in *-er* (type *clatter*) and *-le* (type *sparkle*) which are pretty numerous (see Biese 266—267), but in fact most of these verbs are not derivatives in the way verbs in *-ize* or *-ify* are, because few simple verbs exist alongside of the composites (see 4. 29 and 4. 59). These words are better described as composites of expressive elements, so the suffixes are not categorizers.

5. 6. 10.   Derivation from prefixed verbs is restricted to composites with the prefixes *dis-*, *mis-*, *inter-*, and *re-* (see the respective prefixes). With other prefixes, there have only been attempts at nominal derivation. Biese has *befall, beget, begin, behave, belay, belove, beseech, bespeak, bestow, betide, betrust* as substantives. But they were all short-lived and rare. With the exception of *belay* 1908, a technical term, none seems to be in use today.

Biese has established a so-called *detain-* type, i.e. substantives derived from what he considers to be prefixed verbs. I do not see the point of this distinction as one could analyse very few of his 450 words or so. The majority are unit words.

Zero-derivation and stress

5. 7. 1.   I shall now make a few remarks about such types as have not been treated in this chapter. The stressing tendencies differ according to whether the basis is a unit word or a composite, also according to whether derivation is made from a noun or a verb.

Nominal derivation from composite verbs involves shift of stress. Exs are the types *rúnaway / bláckout, óverthrow, ínterchange, mísfit, réprint* which are derived from actual or possible verbal composites with the stress pattern $\backsim \underline{\perp}$. The process has not yet come to an end which will explain that the OED, Webster and others very often give stress indications which no longer tally with the speech habits of the majority. Many cbs of the *blackout* type and all the sbs of the types *misfit* and *reprint* are stressed like the verbs resp. verbal phrases in OED.

Of prefixal types only vbs with *inter-*, *mis-* and *re-* have developed stress-distinguished sbs. No similar pairs exist for neg. *un-* (no verbal type exists, anyway), reversative *un-*, *dis-*, *be-*, *de-* (*be-* and *de-* are only deverbal).

5. 7. 2.   Verbs derived from composite sbs do not change their stress pattern, see 2. 38. 7. Cp. such verbs as *backwash, background, afterdate, by-pass, counter-weight, outlaw, outline, underbrush* which are forestressed like their underlying nominal bases. This also explains the fluctuation in the stressing of *counter-* vbs, as *counter-sign, counter-sink*, stressed like the sbs though the verbal stress pattern is middle stress/heavy stress.

5. 7. 3.   With unit words the current tendency is to retain the stress of the underlying basis in deverbal nouns as well as in denominal verbs. We may call this homologic stressing. Bladin (58) had stated the fact for denominal verbs without, however, discussing the problem as to the obvious exceptions, while Jespersen (VI. 1. 4) speaks of 'such an important thing in word-formation as the stress-shifting in *record* sb and vb'.

5. 7. 4.   To a certain extent, we have a stress distinction between nouns and verbs which are otherwise homophonous. This distinctive stress pattern occurs chiefly with disyllabic words, *récord* sb / *recórd* vb. Exs are *absent, abstract, contract, extract, accent, affix, infix, prefix, suffix, augment, compound, compress, impress, concert, concrete, conduct, confine, conflict, conscript, consort, contest, contrast, convert, invert, pervert, convict, digest, discord, escort, essay,*

export, import, transport, ferment, frequent, impact, increase, ingrain, insult, object, subject, project, traject, perfume, permit, presage, present, produce, progress, regress, protest, rebel, recess, retail (in BE, in AE it has forestress always), *survey, torment, transfer.*

5. 7. 5.   The number of non-shifting exs is much greater, however. I will first give instances of forestressed words with homologic stress: *comment, compact, exile, figure, plaster, preface, prelude, prison, quarrel, climax, focus, herald, process, program, triumph, waitress, rivet, segment, sojourn, turmoil, contact* 'bring or come into contact', *congress* 'meet in a congress', *incense* 'burn incense', *probate*. To these may be added from the group in 5. 7. 4 such verbs as are felt to be derived from a sb and therefore forestressed like the underlying bases, at least in AE: *accent, conflict, concrete* (as in *concrete a wall*, also in OED), *contract* (as in *contract a document*), *digest* (as *digest a book*), *export, import* (prob. originating in contrastive stressing), *recess* (as *recess a wall*), *survey* (in certain senses), *torment* (frequent), *transfer* (the regular stressing as a railway term).

5. 7. 6.   The group of non-shifting endstressed words is considerably larger. Unit words beginning with *de-, dis-, re-* are especially numerous. Exs are:

accord, accost, account, affront, advance, amount, approach, assent, attack, attempt, attire, avail, cement, concern, decay, decrease, delay, defeat, disguise, dismay, dispatch, display, dispute, distress, escape, exclaim, embrace, exhaust, patrol, present (as a deverbal sb 'presenting position of a rifle'), *precise, preserve, reflect, refresh, regard, relax, release, remove, repair, repay, repeal, repeat, reply, reprieve, repute, requite, resolve, respect, revenge, review, reform, support* and many others (see the list of deverbal sbs Biese 454ff.).

5. 7. 7.   On the other hand, we find instances of distinctive stressing in AE: *address, conserves, discard, discharge* are often heard with forestress when sbs, also *relay* and *research*; *reject* sb with forestress is the only pronunciation possible. Of these, *relay* and *research* may be explained as reinterpretations after the t. *réprìnt* sb/*rèprínt* vb; *reject* is perh. influenced by *subject, object, project, traject*. In any case, this tendency towards distinctive stress in deverbal sbs is weak as compared with that towards homologic stress.

5. 7. 8.   To sum up: the PE tendency with denominal vbs is to give them the stress of the underlying nominal basis, which has in many cases led to homologic stress with all or part of the verbal meanings versus older distinctive stress. Deverbal sbs, on the whole, show the same inclination to homologic stress. But there is also a weak tendency towards distinctive stress, though chiefly in AE. As for the tendency toward stress distinction between nominal and verbal homophones pointed out by Jespersen, it was perhaps vaguely on the analogy of composites that it came into existence. The original stress with these loans from French or Latin was on the last syllable (F *absént*, L *abstráct(um)*), so verbs retained this stress all the more easily as many native vbs were so stressed: *become, behold, believe, forbid, forget, forgive, mislead* etc., whereas almost all disyllabic native sbs, unit words as well as composites were forestressed (the few contrary exs such as *unhealth, unrest, untruth, belief*

hardly count against the overwhelming majority). This may have led to a tendency towards forestress with non-native disyllabic sbs, too. But what has taken on the character of a strong derivative device with composites has proved much weaker with unit words on account of their entirely different structure. Further development seems to point in the direction of homologic stressing.

5. 7. 9.   Cbs of the type *hanger-on* may be mentioned here. As they are functionally characterized by the sf *-er*, the absence of stress shift is only natural. The stress pattern of the underlying verbal phrase is retained.

5. 7. 10.   The stress shifting discussed in 3. 4. 4 involves the phonological alternations of vowel dealt with 4. 1. 28.

VI. BACKDERIVATION[1]

6. 1.   Type **peddle** vb fr. **peddler** sb

If we take a word such as *writ-er*, we connect it with the verb *write*. The existence of a composite *writ-er* entitles us to the conclusion, so to speak, that the basis *write* exists, too. Now, if *writer* is correlated to *write*, then *peddler* must have a correlatum *peddle*, too. Historically speaking, peddle vb is derived from peddler sb. This derivative process is usually called backformation. We prefer the term backderivation to stress its derivative character.

The pseudo-agent substantives which have given rise to backderived verbs, are of various, partly unknown origin, a point that is not relevant to word-formation. Examples are *beg* 1225/*beggar* 1225, *peddle* 1532/*peddler* 1377, *hawk* 1546/*hawker* 1510, *stoke* 1683/*stoker* 1660, *scavenge* 1644/*scavenger* 1530, *swindle* 1782/*swindler* 1775, *edit* 1791/*editor* 1712, *subedit* 1862/*subeditor* 1837, *burgle* 1870/*burglar* 1541.

Other verbs so formed occur in dictionaries, but are hardly used, or are not felt to be 'derivatives', as *broke/broker, carpent/carpenter, butch/butcher, sculpt/sculptor, buttle/butler, ush/usher, stenograph/stenographer*. Mencken (AL[4], Spl. I. 396—397) quotes such verbs as *chiropract, auth* (fr. *author*), *mart* (fr. *martyr*), *chauffe* (fr. *chauffeur*) which, however, have no currency.

6. 2.   Type **televise** vb fr. **television** sb

The analogy of pairs like *act/action, react/reaction, exempt/exemption, correct/correction, infect/infection, elect/election, execute/execution, revise/revision* and others could not fail to create the feeling of derivational connection between the verbs and their respective deverbal substantives. The result has been the tendency to supply the verb when the substantive existed. Exs are *infract* 'infringe' 1798 AE, *resurrect* 1772, *preempt* 1857 AE, *vivisect* 1864, *electrocute* 1889, *televise* 1927. Mencken (AL[4] Spl. I. 396) quotes such verbs as *elocute, emote, resolute, combust*. The frequent alternation *-ate* vb/*-ation* sb (as in *alternate/alternation*) has obviously helped to derive verbs from substantives in *-ation*. Modern Americanisms such as *donate* 1845 and *orate* c 1860 are due to this correlative derivation. Many earlier verbs in *-ate* probably arose under similar circumstances (see 4. 17. 5).

The semantic correlation is accompanied by certain phonological changes which tend to make the patterns into derivative alternations. It is not enough

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[1] E. Wittmann, Clipped Words: A Study of Back-Formations and Curtailments in Present-Day English. Dialect Notes vol. IV. Part II (1914), 114ff. — O. Jespersen, A few back-formations (Englische Studien 70 (1935), 117ff.). — D. Nichtenhauser, Rückbildungen im Neuhochdeutschen. Freiburg diss. 1920.

to say of a verb that it is a 'back-formation from the sb.', a practice OED usually follows. There is no suffix -*ion* to derive substantives from English verbs, which is the reason why such a backderivation as *reune* 1929 fr. *reunion* is isolated in pattern — a matter of importance for the general adoption of such a verb. It is the pattern of *revise/revision, supervise/supervision* where the concept 'see, look' is present (as against that of *provide/provision* where it is absent) that was followed to derive *televise* from *television*. But it is probably the pattern of *resolve/resolution, solve/solution, evolve/evolution, revolve/revolution* that has prevented the currency of *resolute* 1860 and *evolute* 1884 DA.

6. 3.   There are other correlative pairs which are isolated. *Laze* 1592 is formed from *lazy, excurse* 1748 from *excursion, injunct* 1871 AE from *injunction, reminisce* 1829 from *reminiscence, quiesce* from *quiescence, reluct* from *reluctance. Enthuse* 1859 AE (from *enthusiasm*) has gained considerable currency. Other derivative attempts are the verbs *dizz* 1632 (fr. *dizzy*), *salve* 1706 (fr. *salvage*), *jell* 'congeal' 1830 AE (fr. *jelly*), *propagand* 1901 (fr. *propaganda*), *peeve* 1913 (fr. *peevish*). Cf. also the jocular formations Humpty Dumpty makes in Lewis Carrol's 'Through the Looking-glass': *gyre* 'to go round and round like a gyroscope' and *gimble* 'to make holes like a gimblet'.

6. 4.   Backderivation offers linguistically interesting problems. Synchronically speaking, not all backderivations have the same status. We distinguish two groups: 1) *burgle* vb fr. *burglar* sb, 2) *swindler* sb fr. *swindle* vb. While a swindler is 'one who swindles', surely a burglar is not 'one who burgles'. In terms of synchronic analysis this means that *swindler* is no longer felt to be a pseudo-agent substantive but is considered a genuine derivative from *swindle* vb. With regard to the pair *burglar/burgle*, however, the relationship is different. Here the deriving basis is *burglar* while *burgle* is the derivative. The verb *burgle* is zero derived from *burglar*, analyzable as 'be, act as a burglar'. It is parallel to the verb *father* derived from the substantive *father*, the only difference being the pseudo-morpheme /ə(r)/ which is clipped from *burglar*. Originally, all backderived verbs belong to this type and most present derivatives must still be analyzed as zero-derivatives from their 'suffixal' basis. The verb *televise* is naturally analyzable as 'put on television'. The type *swindler* sb fr. *swindle* vb therefore represents an advanced stage of semantic development that many correlative pairs will perhaps never attain. Pseudo-compound verbs of the type *stagemanage* from *stagemanager*, for instance, are all derivatives of the semantic type *burgle* fr. *burglar*. The use of such verbs is still widely restricted with regard to their acceptance by speakers as well as with regard to their use in all verb forms alike. While the derivative correlation of agent sb in *-er* and verb is absolute (any verb can derive an agent substantive as a grammatical form), that of composite agent substantives in *-er* and pseudo-composite verbs derived from them is not: we are far from being at liberty to derive such verbs, and a great number of speakers are still reluctant to use them, at least in all verb forms. Historical knowledge of the problem here

greatly helps us to understand the present-day linguistic situation and explains the limited functional yield of both the type *stagemanage* fr. *stagemanager* and the type *burgle* fr. *burglar*. On the other hand, we cannot grant derivative status to alternations (such as *enthuse/enthusiasm*) unless they are represented by at least several derivationally connected pairs of words. We have included them to show the possible patterns that may develop in speech. With regard to their linguistic value, however, we have to state that non-typical alternations are not relevant to word-formation which is essentially a system of functional, i.e. type-forming patterns.

VII. PHONETIC SYMBOLISM[1]

7. 1. The principle of sound symbolism is based on man's imitative instinct which leads us to use characteristic speech sounds for name-giving. We may imitate things which we perceive through our senses (Direct Imitation). We may also use speech sounds to express feelings (Expressive Symbolism). We cannot tell which is primary as the wish to give vent to our feelings seems as natural as our desire to render adequately what we perceive with our senses. We will call these expressive morphemes symbols.

7. 2. As for direct imitation, we imitate by speech sounds what we hear, i.e. noises, sounds. As, however, noises and sounds are often accompanied by movements (as in *whish, swish, dash, tap* etc.), these also come to be denoted by symbols. By extension, even the originator of a sound may be characterized by the use of a symbol (e.g. *pom-pom* 'kind of machine-gun'). Strictly speaking, there is direct imitation of sounds only when we render our own vocal sounds or those of others. The sound then stands either for the position the mouth assumes or for the sound produced in the respective position. In *bawl*, the *b* renders the softened explosive opening of the lips, while in *baa* 'bleat' the *b* renders the opening of the sheep's mouth. The initial *p* of *peep* imitates the movement little birds make when opening their beaks for a cry. Lull-words are all renderings of the position of the mouth: *ba ba, ma ma* etc.; initial *m* forms almost exclusively words of this kind.

7. 3. With regard to expressive symbolism we note that sounds are often emotionally expressive: /ı/ is suggestive of the subjectively, emotionally small and therefore frequent with diminutive and pet suffixes (*-ling, -let*, OE *-icel*, G *-lein*, L *-icellum, -iculum*). Initial /f/, /p/, less so /b/, often express scorn, contempt, disapproval, disgust: *pish, pooh, ph, fie, foh, faugh* (cp. the exclamation *fiddlesticks, I don't care a fig*, contemptuous words such as *fiddle-faddle, fingle-fangle*, G *p, pah, puh*, F *fi*, L *fu*). Only certain sounds lend themselves to being used as emotionally expressive symbols. The sounds [k], [g], [d] for instance, are not used at all, [t] rarely.

Initial symbols and word families

7. 4. In the word lists below we can see how word families are characterized by certain initial symbols: /sw/ is characteristic of a group denoting swinging movement, /kr/ begins many words expressive of unpleasant noises, and so

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[1] H. Hilmer, Schallnachahmung, Wortschöpfung und Bedeutungswandel. Halle 1914. — J. Reinius, Onomatopoetische Bezeichnungen für menschliche Wesen, besonders im Deutschen und Englischen. Studier i modern språkvetenskap utgivna av nyfilologiska sällskapet 4. Stockholm and Uppsala 1908. — O. Jespersen, Language ch. XX. — O. Jespersen, Symbolic value of the vowel i (Linguistica, Copenhagen 1933, p. 283ff.). — M. Grammont, Traité de phonétique. Paris 1933 (pp. 377ff.).

forth. Some of the symbols are originally imitative symbols whereas others have developed as the result of word blending. While /kr/ is found in many languages with words denoting harsh or unpleasant noises because of its suggestive character, the sound [sw] in itself contains nothing suggestive of the concept 'swinging movement', but is obviously a secondary result, more or less incidental, of several words, as *sweep, swing*, both OE, and OE *swengan* beginning with this sound. With words denoting sound, the imitative principle has probably a great share in the development of initial symbols, as with /b/ and /p/ which demonstrate an explosion of breath by the sudden parting of the lips and therefore seem to be the most natural rendering of what the ear perceives as an explosion outside. We imitate, in instinctive parallelism, an explosion of sound in the outside world by a movement of our speech organs producing a similar result. The symbols /t/ and /d/ are frequent with words denoting striking or knocking against something. They may be imitative after the movement of the tongue: the tip of the tongue strikes against the teeth or alveoles and is withdrawn with an explosion. Initial /g/ is almost only used with words denoting noises coming from or connected with the throat.

7. 5.   To what extent sound symbolism is creative in the names of concrete, non-acoustic things is difficult to tell. Certain sound combinations, as *k . p, k . b, t . p* for protuberant forms (hill, knob, boss, wart, pimple etc.), as in *knab, knob, top, tip*, testify to the tendency. We can hardly tell what the symbolism of these sounds is due to, but we cannot possibly deny the phenomenon. We shall, however, not treat the subject here, first because the problem is rather one of general linguistics, secondly because of the impossibility so far of finding out what the symbolism is based upon. The reader is referred to the book by H. Hilmer.

7. 6.   Many words have in the course of time developed sound-symbolic character. In wf we can only be concerned with such symbolism as has been at work in the coinage of a word, so secondary sound-symbolism is excluded here.

7. 7.   Jespersen (La 20. 6) points out "a natural association between high tones and light, and inversely between low tones and darkness". Despite E *dark*, G *dunkel*, L *obscurus* and a few other examples which Jespersen gives I am skeptical as to the validity of the principle. What about *night* (formerly pronounced with [ɪ]), Gr *nyx* 'night', L *lux, lumen* 'light'? And if Jespersen refers to *gleam, glimmer, glitter* against *gloom*, it must be said that *i* does not denote the light but the smallness of it. That *i* is espressive of smallness (seen emotionally) is not denied here.

7. 8.   We will now look at the various symbols, beginning with final consonantal sounds:

/p/, /t/, /k/, at the end of a monosyllabic word and preceded by a short vowel are expressive of quick, abrupt, short-stopping or explosive noises resp. rapid, short or short-stopping movements. From OE are recorded *knock, pick* (through vs *picung* 'puncturing'), *crack, hit, tuck.* ME are *clack, flick, hack, kick, peck, smack, snack, rap, tap, whop, pop, slip, tap, clip, flap, chip, nip, pat, hit, flit.* More recent are *tick* 1440, *snap* 1495, *quip* 1532, *click* 1581, *quack* 1617, *slap* 1632, *whack* 1719, *plop* 1833, *plap* 1846.

7. 9.   /b/, /d/, /g/, phonetically the voiced counterparts of the preceding group, are semantically also variants of the preceding symbols. The sharpness of the noise resp. the impact is dulled, blunted, softened, and the movement is either slowed down or drawn out. These voiced variants are less frequent than the voiceless plosives. From OE is recorded dial. *trod* sb 'tread', ME are *throb*, *bob* (cp. *pop*), *dab* (cp. *tap*), *tug* (cp. *tuck*), obs. *nib* 'pinch' (cp. *nip*). Newer are *pod* 1530 'prod', *plod* 1562, *pad* 1594 'dull sound of steps' (cp. *pat*), *thud* 1513, *dib* 'dab' 1609, dial. *dod* 'beat' 1661, *chug* 'sound of oil engine when running slowly' (var. of *chuck*).

Opposition of voiced and voiceless final is not, however, a regular derivational pattern.

7. 10.   /m/, /n/, /ŋ/ at the end or in the middle of a word express continuous vibrating sounds. OE are *thunder* (OE *þunor*), arch. *chirm* (OE *cirman*) 'roar, chatter, warble', *hwinsian* 'whine', *whine* (in OE only used for the whizzing noise of an arrow), *groan*, *grunt*, *sign*. ME are *hum*, *gruntle*, *rumble*, obs. *bumble* 'buzz, boom', *clink*, *tink*, *tinkle*, *tingle*, *chime*, *dindle* (now Sc) 'vibrating sound or movement'. Later are *boom* 1440, *ting* 1495, *tang* 1556, *twang* 1542, *bang* 1550, *clang* 1576, *chink* 1581, *ding* 1582 in sense 'speak with wearying reiteration', *whimper* 1513, *drum* 1541, *thrum* 1553, *grumble* 1586, *ping* 1856 (said of a rifle-bullet, a mosquito etc.), *pom-pom* 'machine-gun' 1899.

In *dandle* 1530 and *dangle* 1590 the sense 'move to and fro' etc. is obviously derived from the idea of the moving bell which sounds *ding-dong*. The ablaut form *dingle-dangle* is first quoted 1598 but may be older.

7. 11.   /r/ in the middle or at the end of a word imitates and symbolizes continuously vibrating sounds. The frequency of vibration is, however, considerably lesser than that of the /z/ symbol. OE are *chirk* (OE *cearcian* 'grate, creak, croak'), ME are *chirp*, *chirt* (Sc), *snore*, *snort*. Then come *purl* 1586, *chirrup* 1579, *purr* 1601, *chirr* 'trill like a grasshopper' 1639. Cp. also sf *-er*.

7. 12.   /l/ at the end of a word symbolizes prolongation, continuation and is chiefly developed in sf *-le*, but is also found in simple words such as *wail*, *pule* 'shimper', *warble*, *trill*, *yodle*, *purl*, *chirl* 'warble' (Sc), *bawl*, *mewl*.

7. 13.   /z/ at the end of a word imitates low toned noises characterized by high frequency vibration, as streaming air, the sound made by a bee, by an approaching grenade, an arrow, and in a few words the hissing sound of sputtering fat or oil. The symbol is apparently not older than ME (OE *hwinsian* means 'whine', *hwōsan* 'cough'). ME is *buzz*. Later are *wheeze* 1460, *whiz* 1547, *fizzle* 1532, *drizzle* 1543, *huzz* 'buzz' 1555, *fuzz* 'loose volatile matter' (as in *fuzz-ball*: the /z/ is expressive of the whirled about little particles), *fizz* 1665, *sizzle* 1603, *frizz* 1835, *frizzle* 1839.

7. 14.   /s/ is a weak symbol. *Kiss* is recorded from OE while *hiss* and *siss* are ME. Newer is *buss* 'kiss' 1570 (similar words in other languages, as L *basiare*, G *küssen*, G dial. *Busserl*, Tu (= Persian) *puse*).

7. 15.   /š/ in final position after a short vowel imitates the voluminous sound of rushing air, gushing water, and hence is used expressively for violent movements, esp. blows which are supposed to be accompanied by a rush of

air. The symbol is not older than ME. The chief forms which occur are /æš, ɒš, ʌš, ɪš/, but we have /u/ in *woosh*. ME are *mash, dash, crash, flash, gush, flush, blush, crush, rush*. Then come *plash* 1513, *gnash* 1496, *slash* 1548, *clash* 1500, *splash* 1715, *smash* 1778, *squash* 1565, *squish* 1647, *swish* 1756, *slosh* 1814, *whoosh* 'sound of something rushing through the air' 1856.

7. 16.   The role of the vowels is different from that of the consonants. In direct sound imitation the vowel denotes the pitch, volume, timbre, of the imitated sound. But whether the sound is sharp, cutting, vibrating etc. is indicated by the following consonants.

A high (or thin) tone is rendered by /ɪ/, as in *hiss, swish, whimper, whinney, click, clip, clink, tick, ting, titter*.

Low pitch is rendered by back vowels, as by /ɒ/ or /ɔ/ in *knock, blob, pop, plop, flop, plod* | *bawl, roar, snore, snort, caw*, by /o/ in *moan, groan*, by /u/ in *hoot, toot, boom, coo, whoop, whoosh, croon, tu-shoo* 'call of an owl', by /aʊ/ in *howl, yowl*.

Indistinct low pitch is expressed by /ʌ/, as in *hum, drum, thrum, bump, plump, flump, bubble, grunt, grumble, gulp, guggle, puff, gush*.

Compare also OE *cāwan* 'caw', *grānian* 'groan', ME *hoot* (= /o/) 'hoot', *hum* (= /ʊ/) 'hum', *howl* (= /u/) 'howl'.

Clear and distinct sharp medium sounds are expressed by /æ/ (= OE, ME /a/), as in *bang, tang, twang, rap, tap, slap, pat, crack, clatter, patter, cackle, crash, clash*.

Volume and length of a sound are expressed by a lengthened vowel or diphthong: *hoot, toot, boom, coo* | *moan, groan, drone* | *whine, chime* | *snore, snort, bawl, caw, roar, drawl* | *growl, howl, yowl*.

Short noises are rendered by short vowels (see preceding word lists). The sounds occurring today are [æ, ɛ, ɪ, ɒ, ʌ]. The EMoE sound [ir] has in PE developed into [ɜ(r)] and is no longer expressive of sound. Shortness of the vowel [ɪ] sometimes connotes thinness, as in *cling, tink* a.o. Pitch and volume of sound meet here.

7. 17.   With verbs of movement we observe the following tendencies: quick, rapid movement usually goes with short vowels, slow movement goes with long vowels. It is impossible, however, to affirm anything as to the difference between the vowels.

Short vowels, chiefly in combination with final plosives, are used to express rapid movement, as in *hop, hobble, skip, snap, snack, snatch*. Cp. also the above lists of sound words in which many verbs denote sound as well as movement: *tap, rap, pop, plop, flop* etc.

Apparent exceptions are verbs with the suffix *-er* and *-le*, such as *patter, titter, sizzle, tickle*. The sfs express repetition, continuation of short, rapid movements, though secondarily the idea of slowness or length may arise.

Long vowels go with slow or long movement, as in *flow, float, fleet* (cp. *flit* which is obviously its counterpart though it is much more modern), *teeter* (cp. *titter*), *slide, glide*. The long vowels are hardly accidental. We may 'pull', but not 'draw' with jerks. Water *seeps* (or *sipes*, dial.), and *seep, sipe* are perh. nothing but the lengthened counterparts of *sip*, though *seep* is only used intransitively. The preceding observations naturally apply only to such words

as were presumably coined symbolically. I stress this just to counter the possible argument that long vowel is not necessarily combined with drawn out movement (as *move, throw* etc.) resp. short vowel with short, quick movement (as *look, lift* etc.).

7. 18.   The imitative principle is often misunderstood or misrepresented. It is commonly thought that an onomatopoeia should be the exact rendering of the corresponding noise. The explanations as to the differences in languages is that "our speech organs are not capable of giving a perfect imitation of all 'unarticulated' sounds" and that therefore "the choice of speech sounds is to a certain extent accidental" (Je La 20. 3, a little differently Grammont TP 377). This is, of course, right, but only partly. It overlooks the fact that an onomatopoeia is not a mere imitation of a sound.

7. 19.   Here it is necessary to touch on a question that has been much discussed. Ferdinand de Saussure[1] maintains that the sign is arbitrary, i.e. it is not motivated by the significate, that onomatopoeias are never organic elements of a linguistic system, that they are few in number, and that their coining is to a certain extent arbitrary as well. Charles Bally[2] modifies Saussure's standpoint, admitting the 'signe motivé par le signifiant' for onomatopoeias. This means that an onomatopoeia, say *crash*, evokes the idea of the characteristic noise implied by the word *crash*. This kind of motivation will hardly be called in question, but it has no bearing on word-formation. The point that interests us in wf is to know which particular phonemes are used in a language for the coining of words and what the symbolic value of the respective phonemes is. This will lead us to the question whether a certain idea may not necessarily call for a certain sound; in other words, we will want to know whether there is no motivation of the sign by the significate. I have discussed this point in a paper 'L'étude des onomatopées'[3] and tried to show that while certain morphemes are understandable in a certain linguistic system only, there are others which in slight variants are used in many languages.

The foregoing remarks upon symbols and their connection with sound and movement have already shown that to a certain quality of sound there necessarily corresponds a certain linguistic symbol. Vibrating noises can be rendered by nasals, *r* or *z* only, while anything else as a symbol is excluded. A hissing sound will invariably be rendered by some *s* sound, and so on.

7. 20.   Onomatopoeias are not coined haphazardly. Their composition is determined by the system of the language to which they belong, which partly accounts for the differences of words for the same concept in different languages. Such onomatopoeias have usually one or more elements in common (E *whisper*, G *flüstern*, Tu *fïsïldamak*, L *susurrare* etc.) which are those that have imitative character. But there are also elements which differ from one language to another. As every language has its own phonological system, onomatopoeic coining is largely dependent on the phonemes and phonemic combinations of the language. Words with the initial symbol /hw/ which are frequent in

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[1] F. de Saussure, Cours de linguistique générale[4], 101—102.

[2] Ch. Bally, Linguistique générale et linguistique francaise[2], 127—139, Bern 1944.

[3] *Dialogues* I. 124 ff. Publication de la Faculté des Lettres d'Istanbul 1949.

English would be impossible in French or German, words with initial /kn/ which are frequent in German are no longer possible in English, and so on.

7. 21.   An onomatopoeic word is a compound of several symbolic elements. Take the word *bang*, for instance: the /æ/ renders the sound the slamming of the door causes, the /ŋ/ is imitative of the vibration of the air following it. The /b/ is expressive of the bluntness of the explosive sound (a sharp sound would have been introduced by a /p/, cp. G *päng-päng* 'sound of rifle-shoot-ing'). The initial symbols place a word in a certain semantic group, which is that of the 'blow' class in our case. Words without an introductory symbol, i.e. onomatopoeias which contain one element only, are rare. In Turkish, the crowing of the cock is rendered by /ööröö:/, in German, the braying of the jack ass is expressed by /i-a/.

7. 22.   What we call symbols is another aspect of what is traditionally termed the question of roots. There are many IE or Germanic "roots", in dictionaries listed as **glim*, **glint*, **glis*, **glant* etc., etc. I have preferred not to speak of roots but of symbols, i.e. I have split up the roots into their components because in my opinion roots are not indivisible units, but are composites just as much as *fl-ash*, *fl-ick*, with modification of the vowels or the consonants.

7. 23.   New words may be derived by internal change, chiefly ablaut alterna-tion (as *tip* from *tap*). The principal method, however, is that of symbol blend-ing. The analysis of the expressive values of various speech sounds as given above (7. 21) should not lead us to think that an expressive word is formed by just putting together several expressive sounds. As a matter of fact, it is only two morphemic elements that play a relevant part: the initial symbol, i.e. the consonant(s) preceding the vowel, and the final symbol, i.e. the vowel and the final consonant(s).

7. 24.   If we take the word *flip* 'dart' 1594, we find that its coining was sug-gested on the one hand by other words with the initial morpheme (here called 'symbol') *fl-*, as *flick*, *flit*, *flap*, *flash* (all ME) and on the other hand by words with the final symbol *-ip*, as *hip* 'hop' 1250, *skip* 1300, *whip*, orig. 'move the wings briskly' 1250, *rip* 1477, all expressive of brisk, quick movement. Though several of the simple symbols appeal to us at first sight to be imitative or expressive, it should be noted that most simple symbols, and all compound symbols, are nothing a priori, but have developed morphemic character from the more or less accidental grouping of semantically related words. In *fl-* there is nothing to suggest flying or flowing movement, but in the co-existence of *flow*, *fleet*, *flutter*, *fly*, *flee*, *float* (all OE) lies the germ of all the new words expressive of movement which were coined in ME. The symbol *-ip*, through the short vowel combined with the following plosive, is in itself a more convinc-ing expression of the concept 'brisk movement'. But this is a mere coincidence and does not involve a principle.

7. 25.   Eugene Nida[1] rejects the morphemic value of such initials as *sl*, *fl* on the ground that they do not occur . . . with forms which occur in other com-

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[1] E. Nida, Morphology. The descriptive analysis of words. Ann Arbor. University of Michigan Press 1949, p. 61.

binations. The argument holds good insofar as, indeed, symbols have not the standing of words, prefixes or suffixes which are full morphemes and combine into bimorphemic units (*tea-pot, un-do, child-hood*). Symbols differ from full morphemes in that they combine into units which are not syntagmas in a grammatical sense, but monemes (one-morpheme words). This is a feature that expressive words have in common with other types which are usually treated in word-formation: blending of non-expressive words (type *motel* from *motorist hotel*) and manufactured words (type *NATO* from *North Atlantic Treaty Organization*). This reservation granted, it is hardly possible to deny the morphemic character of expressive symbols. Zellig S. Harris[1] seems inclined to admit them on account of meaning correlation in some words, but basically he holds the same argument Nida uses. A paper by Dwight L. Bolinger[2] is much nearer the ideas set forth here. But while I regard morphemes as Saussurean signs, i.e. phonetic-semantic entities, and restrict the morphemic character of initials and finals to symbol-coined words, Bolinger carries the principle much farther, tentatively considering as morphematically related also such words as, *sh/utter* and *m/utter* (with the same morpheme or, as he calls it, phonestheme *utter*), *b/low, b/reak*, and *b/eat* (with the morpheme *b*). On the other hand, as he has not limited the morpheme character of such elements to expressive words, he finally sees himself compelled to dismiss these elements from strict morphematic analysis. The initial symbol must be considered the determinant while the final symbol is the determinatum.

7. 26.   According to whether the initial (as /fl/) or the final (as /ip/) is considered, symbolic coinings form an alliterative or a riming group. We shall treat the initial symbols first. As pointed out in 7. 24, they are morphemes occurring with a group of semantically related words. The initial /bl/, for instance, introduces many words that stand for the idea 'blow, swell'; /sp/ is initial with many words expressive of the idea 'spit, reject', and so on. Some of the symbols are obviously of imitative origin, as /b, p, m/ which partly stand for the opening of the mouth or the position of the lips, /g, k, hw/. Others seem to be of emotionally expressive origin as /tš/, /dž/, (partly) /p, f, m/. With the majority of symbols, however, the morphemic value appears to be the secondary result of grouping, as we have already pointed out.

General remarks on initial symbols

7. 27.   The *s-* groups need special mention here. Absence or presence of initial *s* before liquids and stops seems to connect a few words in the Indo-European languages. E *slime* and its Germanic cognates are probably related to L *limus*, G *schmelzen* (OHG, MHG *smelzen*) and its cognates apparently belong together with E *melt*. E *smelt* 'melt', first recorded 1543, may be a loan from Dutch, but it may equally well represent a more recent variant of *melt*. Old

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[1] Zellig S. Harris, Methods in structural linguistics. Univ. of Chicago Press. Second Impression 1955, 177—178 and 193—194.

[2] Dwight L. Bolinger, Rime, Assonance, and Morpheme Analysis. Word 6. 117ff. 1950. Cf. also Morton W. Bloomfield, Final root-forming morphemes, American Speech XXVIII. 158—164, 1953.

Greek had *smýxōn* beside *mýxon*, *smýraina* beside *mýraina* (both fish names), *smyrízō* beside *myrízō* 'anoint, perfume', *smîlax* beside *mîlax* 'yew tree', *smygerós* beside *mogerós* 'miserable, wretched', *smikrós* beside *mikrós* 'small, little' (the derivative *smikrínēs* 'miser, niggard' has no by-form without *s*). We know nothing about the origin of the variation. The *s* may originally have been imitative of the sound accompanying a movement (cf. *melt/smelt* where the process of fusing metal, for instance, would suggest such an idea). One might also think of an emotively expressive origin (cf. *mogerós / smygerós* and *mikrós / smikrínēs*). For English example of word pairs see below 7.83.

7. 28.   The initial symbols sometimes overlap as do other morphemes. This is especially so when the final symbol is particularly strong. For the concept 'trifle' we have *fiddle, twiddle, piddle* (with their variants *peddle* and *paddle*), and *quiddle*, all recorded in the 16th century. The basis may be *fiddle* which attracted the otherwise unexplainable variants. It will be noted, anyhow, that the final symbols, as containing the vowel, are the real 'roots' while the initial symbols have the modifying character which prefixes have with radicals. This will be more clearly understood in the chapter on final symbols.

7. 29.   Sound-imitative initial symbols frequently have counterparts in other languages: /b/ occurs in OGr *bē* 'the bleating baa of sheep', *bombos* 'dull noise', L *bombus* 'dull noise' (hence the various 'bomb' words), *bālāre* 'bleat', LL *bombitare* 'hum', ML *baulare*, F *bêler* 'bleat', *boubou* 'cry of the owl', *boum* 'sound of a drum', *bondir* (in Old French = 'resound'), G *bum, bums, bimmeln* etc. Initial /t, d/ for the concept 'strike against' is frequent in many languages, cp. the widely used root *tok* 'strike' in the Romance languages (see Romanisches Etymologisches Wörterbuch, von W. Meyer-Lübke, s.v. *tok*), in Turkish the same root occurs in *tokmak* 'knocker' and other words. Initial /kl/ with words denoting vocal and other noises is found in OGr *klōzō* 'cluck, click' and other variations of the 'root' *kal* (*kaleō, klazō, kleizō* etc.), L *clamo, clangor*, LL *clocca* 'clock', LL *cloppus* 'lame' (apparently from the clapping noise of the limping foot), F *claquer* (15th c.), *clic-clac* 'clack', *clapper* 'clap', *clapet* 'kind of valve' (1517), G *klack, klapp, klipp-klapp, klatschen* etc. The initial /kr/ also has counterparts in other languages: OGr *krazō* 'scream', *krizō* 'scream, shriek, crack', *krótalon* 'braggart, a rattle instrument', L *crepare*, **critare* (= F *crier*), F *craquer* 1546, *cric-crac* 'noise of breaking or tearing something' 1520, *cri-cri* = *criquet* 'grasshopper' (12th c.), *croasser* 'croak' 1564, *crin-crin* 'jarring violin', G *krachen, kreischen* etc.

7. 30.   Many of the symbols go back to OE and correspond to symbols in cognate Germanic languages. On the other hand, the symbolic words we use today are chiefly ME or later. This may be so because traditional OE literature refrained from handing down such popular or colloquial words, or just because there were not more in OE. This cannot be decided with certainty. It cannot, however, be denied that present-day speech habits favor such coinings very much. There is the recent AE word *stash away* 'hide away' which is obviously from *stow, stack* plus *dash*. The OED has another *stash* 'stop abruptly' 1811, obviously blended from *st(op)* and *(d)ash*. The initial /sp/ is already Indo-European with words denoting 'spit, reject' (L *spuo*, OHG *spiwan*, Gothic

speiwan, OE *spiwan*), but /spl/ is much later. Through the blending of *sputter* and *plash* we get the word *splutter* 1677 which was later followed by *splash* 1715 and *splatter* 1784.

7. 31.   To deny the word forming character of initial symbols is hardly possible. Many of the words listed under the respective symbols are usually considered as of uncertain or obscure origin. Now, I am not pretending to furnish a method by which everything unknown is explained as 'symbol-blending'. But if we consider how many words suggestive of the same idea are characterized by the same symbol, it is impossible to deny that the coinage was prompted by the symbol. To say that an initial may introduce a lot of other ideas would not be to the point. Initial *sp* is certainly found in *speed, spin, spot, span* etc. where the idea of symbol is absent. But then, /aʊ/ in *shout, howl, yowl* is suggestive of a long-drawn and loud sound while in *house, mouse, lout* etc. there is no such implication. There is no common semantic feature in *speed, spin, spot, span* whereas words with the symbol /sp/ have a common semantic denominator.

Initial symbols

7. 32.   /p/ is the voiceless variant of /b/. Directly imitative of the parting of the lips in the rendering of some vocal sounds, it may also be used for strictly explosive vocal sounds, and finally be expressive of explosive noises in general. OE are *pyffan* 'puff', *pūnian* 'pound' (apparently from the sound), *pipian* 'blow the pipe'. Later are *pipe* 1250 = *peep* 1460 'cry of young birds', *puff* 1225, *purr* 1620, *purl* (said of a brook) 1586, *pipit* (a bird) 1768, *pop* 1386, dial. *pash* 1362, *pat* 'dab' 1400 sb (vb = 1567), *patter* 1394, orig. 'recite prayers', representing *pater* = *paternoster*, but at the same time an onomatopoeia, *pang* 1526 (obviously symbolic for 'shot' — like *pain,* cp. G *päng* for the sound of a rifle shot), *pad* 'dull sound of steps' 1594 (obviously a variant of *pat* and *bat*), *pitter* dial. 'make small sounds, as a grasshopper' 1592, *ping* 1886, *ping-pong* 1900, *pom-pom* 'machine gun' 1899.

Words denoting movement in which the original character of sound-imitation has more or less disappeared are *pick* (OE in sense 'to puncture'), *peck* 1382, and *pop* 1386.

The sound [p] is emotionally expressive in *piddle* 'trifle' 1545. The word is probably a variant of *fiddle* which is recorded with the same sense in 1530. Ablaut variants are *paddle* (in the now obsolete sense 'trifle'), and *peddle* 'trifle, dally' 1545.

7. 33.   /pl/ is found with several words conveying the idea of dull impact, chiefly in connection with water. The symbol does not seem to be older than ME: *plump* 13.., (*plunge* 1374 is fr. OF *plungier* which is itself partly onomatopoeic), *plash* 1513, *plod* 'walk heavily' 1562, *plop* 'drop into water without splashing' 1833 = *plap* 1846. AE is *plodge* 'walk in mud or water, plunge' (ADD) which is obviously a blend of *plod* and *plunge*.

Pluff 'strong puff' 1663 is Scotch.

7. 34.   /pr/ is the initial symbol of a number of words with the basic meaning 'prick', as *prick* OE, *prickle* in obs. sense 'a thing to prick with' OE, *prong*

1492 (with sound imitation of the metallic sound, cp. obs. *prong* and *prang* in sense 'pang' and the word *pang* itself), *prod* 1535 with the obs. variants *proke* 1225 (obviously an ablaut variant of *prick*) and *prog* 1600 (with the voiced final of *proke*).

In a few sound words it seems to be a variant of /br/, app. with the connotation of greater liveliness: *prate* 1420 seems to be MDu *praten*; an English coining is its frequentative *prattle* 1532, while *pribble* and *prabble* (Sh) are variants of obs. *brabble*.

7. 35. /sp/ is found at the beginning of many words expressing jet movement. Many of the words imply the idea 'reject' or 'spit', as *spew, spit, spurn* 'scorn' OE. The symbol is Indo-European. Exs are *spout* 1330 (a variant of *sprout* 1200), *spurt* 1570 = *spirt* 1582 'issue in a jet, squirt', *spatter* 1582, *spattle* 1611, *spirtle* 1603 (now dial.), *sputter* 1598, *spawl* 'spit coarsely' 1598 (arch.), *spurtle* 'burst out, spirt' 1633, *spat* 'start up sharply' etc. (AE) 1809. *Spang* 'spring, leap' (north. E and Sc.) is termed 'of obscure origin' in the OED, but it is probably an onomatopoeic coining, consisting of the symbols /sp/ and /æŋ/; the word is originally used with reference to the string of the bow or an arrow. Its variant is *spank* 1727.

7. 36. /spl/ is a modern symbol. It combines /pl/ and /sp/ in *splutter* 1677, *splash* 1715, *splatter* 1784, *splatch* 'splash, patch of color' 1665 (AE and Sc), vb 1825, *splat* 'pat, slap, spat' (ADD, 1941), *splosh* 'splash' (ADD, 1818), *splodge* 'trudge or plod splashily through mud or water' 1859 (an ablaut variant of *splatch* with intensifying voiced final), *splunge* 'plunge' 1839 (AE and E dial.). AE *splurge* 'ostentatious display' 1832 is termed 'imitative' in the OED, but I cannot account for the final symbol. *Splotch* 1601 is a blend of *blotch* and *spot*, its variant is *splodge* 'clumsy splotch' 1854.

7. 37. /spr/ is a variant of /sp/, with about the same meaning. It introduces words with the general meaning 'spread', as in OE *spryttan* and *sprȳtan* 'sprout', *sprengan* 'sprinkle'. The vb *sprout* is not recorded before 1200, but the word is certainly OE, too, as the second ptc *āsproten* does occur. *Spring, sprawl* and *spread* also go back to OE. Newer are *springle* 1502 (now rare or arch.), a variant of *sprinkle* 1400, *besprinkle* 1440, obs. *bespring* 'besprinkle' 1387, all frequentative ablaut variants of obs. *spreng, bespreng* 'sprinkle, besprinkle'.

7. 38. /b/ may originally represent merely the sound made when the mouth is opened and at the same time imitate a softened explosion of sound (see its voiceless counterpart /p/). It is found in many languages (see above 7. 29) as an initial of words denoting sound, as in *bark, bell, bellow, belch* (OE). Exs are *babble* 1230, obs. *bumble* 'buzz' 1386, *buzz* 1398, *boom* 'hum, buzz' 1440, dial. *bum* 'hum loudly' 1450, *bawl* 1556, *bow-wow* 1576, *baa* 'bleat' 1586, the exclamations *boh, bo, boo, booh.* Imitative of sound are also *bull* 1200, *bat* sb 'stick', vb 'strike' 1440 (cp. *pat*) and *buss* 'kiss' 1570.

Originally imitative of sound, but now primarily expressive of the accompanying movement are *bob* 'strike, rap, tap' 1280 (cp. *pop*), *bang* 1550, *bump* 1566, obs. *bum* 'strike, knock, thump' 1579, *bash* 1641, *bubble* 1400 and its obs. variant *burble* 1300.

7. 39. /bl/ is an initial symbol with many words expressing the idea 'blow, blow up, swell', as in OE *blow, blast, bladder, blain (chilblain)*. The symbol was strengthened by the loans *blaze* in obs. meaning 'blow' 1384 (= ON *blása*) and *blister* 1300 (= OF *blestre* 'tumor'). A variant of *blister* is *bluster* 1494. Other words are *blurt* 1573 and *blore* 'violent blowing' 1440 with the same imitative final as *snore*.

/b/ in combination with /l/ is often used to imitate, with the protruded lips, the noise of a bubble, also the bubbling sound of confused *blubber*. Hence we have the idea 'blubber' on the one hand and that of 'swelling of the lips, swollen lips', sometimes also 'blob' (i.e. the concrete thing itself seen as a protruding shape, as a bubble, a blot or the like. Cp. L *balbus* 'blubbering', *balbutire* 'blubber', *bulla* 'bubble, nob' etc.) on the other. Perhaps this is really at the root of the idea 'blow up, swell'. Exs are *blubber* 'bubble up, give forth a bubbling sound' 1325, *blub* 'swell, puff out' 1559, obs. *blabber* 'bubble, mumble' 1362, *blabber-lipped* 'with protruding lips' 1377 = *blobber-lipped* 1593, *blab* 'chatterer' 1374 (Ch.), later 'babbling, loose talk', *blob* 'mark with a blob of ink or color' 1429, sb = 'bubble, pimple' 1536, its variant *bleb* 1607, its obs. variant *blab* 'blister' 1656. *Blizzard* 1829 belongs to the 'blow' class, with the *-izz* of *whizz, fizz* plus sf *-ard*.

There are several words denoting vocal sounds with the initial /bl/: *bleat* OE, *blea* 'bleat; cry piteously, as a child' 1568 (obs. exc. dial.), *blather* = *blether* ME (which is, however, prob. f. ON *blaðra*), *blatter* 'speak or prate' 1555 (the OED assumes L *blaterare* as the etymon and additional imitative influence; the word is formed like *patter, smatter* etc.), *blate* 'babble, prate' (Pepys). The ADD records *blatter* 'speak volubly', *blat* 'bleat'.

7. 40. /br/ is found with a few words expressive of unpleasant noise: *brack* 'noise, outcry' 1200, its variant *brag* 1360, *brawl* 1375, obs. *brabble* 'brawl' 1500, obs. *brangle* 'brawl, wrangle' 1600, *brash* 'sickness arising from disorder of the alimentary canal; sudden dash of rain' 1573.

7. 41. /t/ is a variant of /d/ and chiefly found with words denoting sound produced by a smart stroke against a body. Exs are *tap* 1225, *tink* 1382, *tinkle* 1382, *tingle* 1388, *tittle* 1399, *tick* 1430, *tattle* 1481, *tip* 1466, *ting* 1495, *toot* 1510, *tuck* (of a drum, 13.., not "a. ONF. *toker, toquer*", as the OED has it, but an independent development of the widespread symbolic root *tok*)[1], *tickle* 1330 (prob. orig. 'a series of ticks = light touches'), *tang* 'strike a bell' etc. 1556, *tick-tack* 1549, *tittle-tattle* 1529, *titter* 'laugh' 1619, *tootle* 1820 (frequ. of *toot*), *too-too* 1828 (with the additional nuance of depreciativeness), *tum* 1830, with the reduplication variants *tum-tum* and *tum-ti-tum* 1859 to denote the sound of a drum, or a stringed instrument when plucked.

Initial /t/ is sometimes emotionally expressive, i.e. the 'stroke' is figurative: *tush* (an arch. exclamation of impatience) 1440, *tiff* 'outburst of temper' 1727, *tosh* 'bosh' 1892 (variant of *tush* and *bosh*). Obs. *tiff* 'drink, sip' 1769 is a blend of *tipple* and the imitative symbol /if/.

With verbs of movement /t/ is infrequent: dial. *titter* 'totter' 1374, its ablaut variant *totter* 1200, its U.S. variant *teeter* 1846, *toddle* 1600, *tottle*

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[1] See W. Meyer-Lübke, Romanisches Etymologisches Wörterbuch s.v. *tok*.

'totter' (ADD), all words expressive of unsteady movement. No vb *tot is recorded in OED, but there is an adj *totty* 'unsteady, shaky'.

7. 42.   /tr/ introduces a number of words with the basic idea 'tread'. OE are *tread, trod* sb, *trap* (prob. orig. sound imitative). Later we have *tramp* 1388, *trample* 1382, *trip* 1386 (the OED gives OF *triper, treper* as its etymon; the word is prob. nothing but the ablaut variant of *trap*, as the sense 'cause to fall' also points out), *troll* 1377 'stroll', *trudge* 1547. *Trot* is app. OF *troter*.

7. 43.   /st/ is an old IE symbol that has formed many words with the basic idea 'stand' and 'step' which are common Indo-European property (OGr root *sta-*, L root *sta-* etc., in English represented by such words as *stand, step, stead, sty* etc.). Apart from this common stock, English has only a few new formations, as *stumble* 1325 (see *-umble* 7. 81), *stamp* 1200 with variant *stomp* (the word is not recorded in OE, but the ablaut form *stempan* 'stamp' is). Both words are obviously mere sound imitations with the symbol /st/, and as the initial symbol is common in Indo-European languages, it is no wonder that parallel words should be found in so many languages; see the entry *stamp* in the OED. The OED establishes asterisked OTeut. forms for the word. Newer are *stodge* 'stuff, gorge' 1674 (for the symbolic value of *-odge* see *-udge*), *stash* (*st-* plus *-ash*), AE (H. Melville a.o.). OED has another *stash* 'stop abruptly' 1811 which is a blend of *st(ay, stop)* plus *-ash*.

7. 44.   /str/ forms several groups with the initial: the 'stride' group is represented by *straddle* 1565 = dial. *stroddle* 1607, perh. ablaut variants of *striddle* 'straddle' etc. 1530 (the latter is either a frequ. of *stride* or back-derived from *striddling*), *stroll* 1603 (the second element is that of *roll, loll* etc.).
  Struggle 1386 is prob. a blend suggested by *strive* and obs. *tuggle* 'tug'. *Strum* 1775 was suggested by *strike*, while the final is that of *drum, thrum*.

7. 45.   /d/ introduces words denoting the sound produced by a stroke against a body. The sounds, however, are not sharp or smart as with /t/ words. Exs are *din* OE, *dash* 1290, orig. 'strike, smash', *dump* 'fall heavily' 1300, *dab* 'soft blow' 1300 (cp. *tap*), its frequ. *dabble* 1557 'paddle, besputter' (sense influenced by *drabble*), the ablaut variants *dib* 1609, *dibble* 1622, arch. *ding* 'knock, hammer' 1300, *ding-dong* 1560, dial. *dod* 'beat' 1661.
  Like /t/, initial /d/ is found with a few words expressive of unsteady movement which are often variants of /t/ words: north. E dial. *didder* 1375 'quake, quiver' = dial. *dither* 1649 = *diddle* 1632, its ablaut variant *dodder* 1617, dial. *daddle* 'walk totteringly' 1787 = StE *doddle* 1653.
  As the *ding-dong* of the bell is connected with the idea of swinging movement, the formation of words suggestive of swinging movement is made possible: *dangle* 1590, *dandle* 'move lightly up and down' 1530 (cp. MF *dandin* 'little bell' and *se dandiner* 'swing about one's body, swagger').
  In *dindle* 1440 'tinkle; ring; tingle (as with cold or pain)' = *dingle* 1573 there is only the idea of sound, resembling the one caused by the ringing of a bell.

7. 46.   /dr/ introduces many words with the basic meanings 'drop' and 'drive', as OE *drēosan* and *drūsan* 'fall', *drēahnian* 'drain', *dragan* 'drag', *dreflian* 'drivel', *dros* 'dross', *draught, draw, drive, drop, drip, drain* (all OE).

Droop 1300 and *dregs* 1300 are prob. Norse words, *drag* 1440 may be a northern English variant of *draw*. *Draggle* 1513 is the frequentative of *drag* with the semantic influence of *drabble* 1400 (which seems to be a loan from Low German). Variants of *drop* are *drib* 1523 (obs. as a vb, but used as sb), *dribble* 1565, *dripple* 1821. With another final we have the symbol in *drizzle* 1543. *Drown* 1300 may come from the /dr/ of *drink, drench* and *down*.

The symbol is seldom used with words denoting sound. There is OE *drēam* 'music, melody' (—1330). Modern are *drum* 1540, *drawl* 1597 (at the same time suggesting *draw* and the final symbol *-awl*; the OED assumes Du or Low German origin).

Drool 'drivel' 1847 is explained as a "contracted form of *drivel*" (OED), but the explanation does not sound convincing. I have none to offer myself.

7. 47. /k/ is chiefly found with words denoting vocal sounds, as in the Indo-European root, *kal, kla* (OGr *kalō*, L *clamo* etc.). OE are *call, cow* (after the sound), *kiss*. OE *cēo* 'jackdaw' is now *chough* and means 'crow'. More recent words are *cackle* 1225, *cough* 1325, *cuckoo* 1240 (imitates the cry of the bird. The word need not be considered a loan from French, as the OED has it; it was coined anew from OE *gēac* as was G *Kuckuck* fr. OHG *gauh*, MHG *gouch*), *caw* 1589, *coo* 1670. In north. E dialects we find /k/ (instead of southern [tš]) in *kink* 'gasp for breath' fr. OE *cincian, kinkcough* 'whooping-cough'.

For dial. *cack* 1436 the OED assumes L *cacare* as the etymon. Kluge (EW) derives G *kacken* from L *cacare*, too, as a jocular student's word. But the word is found in German dialects, and Modern Greek has *kaka* 'excrements'. Are all these words from Latin?

There are a few words denoting movement: *cuff* 'strike with the fist or with the open hand, buffet' 1530 (with the *-uff* of *buff*, 'blow, buffet', cp. G *knuffen, puffen* 'prod'; the OED terms the word 'of uncertain origin'; Weekley derives it from F *coiffer*), *kick* 1380 (with the *-ick* of *pick, prick*, perhaps at the same time imitative of sound: the first instances of OED occur in such phrases as *kick against the spur* and *kick against the prick*). The word *cut* (first rec. 1275) is unexplained. Various etymologies have been suggested. It is prob. a symbolic word. Quite similar is the Tu onomatopoeia for the sound of scissors cutting something: *kıt kıt* (*ı* represents a high back unrounded sound). There is no need to assume an OTeut. root **kut-, *kot-* (OED).

7. 48. /kl/ is a frequent initial with words denoting sound. OE are *clipian* 'call', *clatrian* 'clatter', OE *clucge* 'bell' probably belongs here, too. Newer are *clack* 1250, *clap* 1225, *cluck* 1481, *clash* 1500, *click* 1581, *clutter* 1556 (var. of *clatter*), *clang* 1576, *clank* 1614, *clamber, clamor* 'bell-ringing' 1611, *clam* 'clang of bells' 1674, *clump* 'tread heavily' 1665, *clink-clank* 1790, *clamp* 1808 (dial. var. of *clump*), *clomp* 'clump' (ADD), *cloop* 'sound of a cork drawn from a bottle' 1848. *Clip* 'cut' 1200 denotes movement after the accompanying sound.

7. 49. /kr/ introduces words denoting jarring, harsh, or grating sounds or twisted movement or position. *Crow, crane*, and *crack* go back to OE. Later are *creak* 1325, obs. *crook* 'croak' 1325, *crake* 1386, *crush* 1398, *crash* 1400, *croak* 1460, *crackle* 1500, *crick-crack* 'repeated sharp sound' 1565, obs. *crunk*

'utter a hoarse, harsh cry' (said of birds) 1565, *crick* 'sound of a grasshopper or the like' 1601, obs. *crunkle* 'cry like a crane' (frequ. of *crunk*) 1611, *crump* 'noise horses or pigs make when eating' 1646, *crunch* (with AE dial. var. *craunch, cronch*) 1801, *crank* 'make a jarring or grating sound' 1827, *cronk* 'cry of the wild goose' 1878 AE, *crumb* 'sound of bursting bomb or shell' (World War II).

/kr/ is a widespread Germanic initial for words with the basic meaning 'twisted, distorted, crooked' (G *krampf, krumm* etc., Du *kramp, kram* etc., etc.). OE are *cringan, crincan* 'draw oneself together spasmodically, *crank* (as in *cranc-stæf*). There appear to be two 'roots': *cr.nk* and *cr.mp* in several variants. The word *crumpled* 'crooked, curled' is recorded from 1300 (the full verb occurs in the 16th c. only), obs. *crump* 'curl up' is quoted 1325 and is obviously a variant of *cramp* 1374 (for which the OED, quite unnecessarily, assumes OF *crampe* as the etymon, though the word is itself a loan from LG). Another variant is *crimp* 1398 'shrink, curl'. The root *cr.nk* is represented by the before-mentioned *crank, cringan, crincan, crenge* 1225, orig. 'contract the muscles', the predecessor of *cringe* (appearing in the 16th c. only), *crinkle* 1385 with dial. var. *crunkle* 1400, *crankle* 'run zigzag' 1594, *crinkle-crankle* 'wind in and out' 1598. *Crick* 'spasm of the muscles' 1440 contains the same semantic basis, but has as a second element *-ick* (of *prick, pick* etc.) which suggests sharp suddenness.

The idea of twisted movement probably also underlies *creep* OE (Kluge, EW s.v. *kriechen* has the same idea), which was followed by *crawl* 1300 (with the final symbol of *sprawl* (the OED suggests Norse origin), *crouch* 1394 (may be a blend of /kr/ and *couch*). *Crisp* 'curl, twist' is, however, L *crispus* which passed into OE as adj *crisp* and is first attested as a vb in 1340.

7. 50. /sk/ is frequent with verbs implying quick, brisk movement, as *scour* 'rush violently', *skip, skit* 'caper, leap', obs. *scope* 'skip', *scuttle, scuddle, scud, scutter, scoot, (helter-)skelter, skedaddle, scamper*. But the origin and etymology of these words is too uncertain to allow any conclusions as to the word-forming force of /sk/ in English.

English coinages are prob. *skirr* 'run away hastily' 1548 (/sk/ plus *-irr*), *scurry* 1810 (/sk/ plus *-urry*), *scuffle* 'scrambling fight, tussle' 1579 (/sk/ plus *ruffle, shuffle*). The OED supposes phonetic symbolism in *scud*; but final /d/ is not connected with the idea of briskness; we should expect a /t/ instead.

7. 51. /skr/ is an initial symbol with words denoting unpleasant sounds or irregular movement. Partly a variant of /kr/, it is OE. Unlike [sk], however, which resulted in ME [š], [skr] does not everywhere seem to have developed into [šr], as several word pairs with [skr] and [šr] exist in ME and MoE: e.g. *screw/shrew* (dial.) fr. OE *scrēawa*, ME *screpe/schreape* fr. OE *screpan* 'scrape' (see OED s.v. *scr-*). *Scritch* 'screech, shriek' is not recorded before 1250, but prob. repr. OE **scricc(e)an* (as *clitch* fr. *clycc(e)an*), with the roots /kr.k/, /skr.k/, cp. OHG *scrian* = MHG *schrien* and MHG *krischen* 'screech, shriek'. A variant of *scritch* is *scratch* 1474. Other words are *scream* 1200 (the /m/ is symbolic of the vibrating continuation of the sound; there is also the variant *shream* 1230), *screak* dial. 'screech' 1500 (prob. a variant of *creak*, not "a. ON. *shrǽkja*" as the OED has it), *screech* 1560 (another variant of *scritch*), obs. *scranch*

'crunch' 1620, with AE dial. variant *scraunch* (ADD), *scroop* 'creak, squeak' 1787 (/skr/ plus *whoop*).

Words denoting movement (with the basis 'scrape, scratch') are prob. orig. imitative of sound, as OE *scrapian, screpan* 'scrape', obs. *scrat* 1225 'scratch at a p.' (cp. OHG *krazzōn* = G *kratzen* 'scratch'). *Scratch* 1474 is /skr/ plus *cratch* 'scratch' (now obs., 1320); *scrawl* 1380, orig. 'sprawl' is prob., as the OED also thinks, a variant of *crawl*; *scrub* 1595 is the symbol plus *rub*; *scramble* 1586 may be the symbol plus *amble*; *scriggle* 'wriggle, struggle' 1806 shows the symbol blended with *wriggle*. *Scribble* 1465 may in part be ML *scribillare*, but its adoption was certainly prompted by the symbolic value of /skr/. Its ablaut variant is *scrabble* 'scribble, scrawl' 1537. *Scrawl* in sense 'scribble' etc. (1611) is obviously influenced by them (the OED quotes *scrawl* 'scribble' as a separate verb, though leaving the possibility of identity open).

7. 52. /g/ occurs almost only with words denoting guttural sounds or such as resemble guttural sounds. It is therefore chiefly found before velar vowels. *Gulch* 'swallow or devour greedily' (now obs. in StE) is not recorded before 1225 but is prob. older; the *-ch* seems to point to earlier *-cian*. Later are *gulp* 14.., *gush* 1400, *gaggle* 1399, its ablaut variant *giggle* 1509, *gabble* 'jabber' 1577, *gobble* 1680 (said of a turkey cock), *gurgle* 1562 = *guggle* 1611, *guttle* 'eat greedily' 1654, *guzzle* 'swallow liquor greedily' 1576, *gargle* 1527 (may be infl. by F *gargouiller*). *Gulch* 'ravine, cleft' AE 1850 may be the same as *gulch* vb, the common denominator being that of 'swallow up'. *Gab* sb 'talk' 1681 and its dial. var. *gob* 1695 are prob. derived from *gabble*; whether *gob* 'mouth' 1550 is the same word or fr. Gaelic or Irish *gob* 'beak, mouth' (OED) is uncertain. *Guff* 'puff, whiff' 1825 is one of the many *-uff* variants, while *guffaw* 1720 with the unusual final sound, is orig. Scotch. *Gong* 1600 is a Malay word.

7. 53. /gl/ is an initial with words expressive of the idea 'light, shine', as *glass, gleam, gleed* 'live coal', *glisten, glow* OE, OE *glōm* 'twilight of the evening', *glare, glent* 'glean, shine', *glimmer, glimpse, glisten*, arch. *glister, glitter, glim* 'shine, gleam', *gloat, gloom, gloss*. I am not trying to explain these words which are based on common Germanic "roots" (*gl.m, gl.t, gl.s* with various vowels), but only want to point out the phenomenon of the common initial of the supposed "roots". As an English word-forming element we have /gl/ in 'look' words: obs. *glaze* 1601 (fr. *gaze* plus *glare, glance*), *glint* 1440 as the ablaut variant of *glent* 13.., *glower* 1500 (*glow, glare, glance* plus *lower*), *glum* 'look sullen' 1460 as a prob. ablaut variant of *gloom* 'look sullen' 13...

7. 54. /gr/ is prob. of sound-imitative origin with words denoting deep-toned, grumbling, inimical or menacing noises, as occurring in OE *gryllan* 'give a harsh sound', *grin, grunt*, adj *grim* and obs. *grimly* (OE). Later are *growl* (Wycl.), *gruntle* 1460, *grumble* 1586, *gruff* 1533 (prob. the symbol plus *-uff* though the word is orig. spelt *grof*). The symbol has been strengthened by loans such as *groin* 1300 (OF *grognir, grogner*), *grutch* 1225 (OF *groucher*). A variant of the latter is the now usual *grudge* 'grumble' 1450. *Grum* 'glum, harsh' 1640 is the symbol blended with *glum*. The word *grouse* 'grumble' 1892, orig. military slang, is unexplained.

The symbol occurs in other languages as well, as in F *grommeler, grogner, grincher, grincer,* G *grell, greinen, grollen* (see KLEW under these words).

Whether the root *gr.p* 'grip' etc. has imitative origin (perhaps after the menacing noise accompanying the action) cannot be decided. MoE variants of *grip, gripe, grope* (OE) are *grab* 1589, *grabble* 1579, *grapple* 1530. An early variant of another kind is *grasp* 1382, obviously metathetic from **graps*, with the *s* we have also in *glimpse* fr. *glim* (cp. G *klapsen, tapsen,* dial. *grapsen* 'grasp').

7. 55. /f/ has not formed any larger group of semantically connected words. It is prob. imitative in *fart* 1250 (with many cognates in other Germanic languages), which was followed by *fizzle* 'break wind quietly' 1532 (this meaning is antiquated now). *Fuzz* 'loose volatile matter' 1600 is an ablaut variant of this onomatopoeic root, and *fuss* 1701 may be its voiceless counterpart, the common basis being that of 'a lot of light stuff'. *Fizz* 'make a hissing or sputtering sound' 1665 contains the thin-toned variant of *-uzz* which we also have in *sizzle* (1603). *Fizzle* joined *fizz* in meaning about 1850 only. Obs. is *famble* 'stammer' 14.. (with the *-amble* characteristic of unsteady movement, see *-amble*) and *faffle* 'stutter' 1570 (both with imitative force of the initial). *Fumble*1508 is a variant of *famble*, as final *-umble* is a variant of *-amble*, *fuddle* 'tipple, booze, muddle' 1588 has the *-uddle* of *muddle, puddle*, but it seems difficult to tell what the initial stands for.

7. 56. /fl/ is an initial with words denoting movement, orig. flying or flowing movement, as in *flee, fleet, float, flicker, flow, flutter, fly* (OE). Coinages since ME have been pretty numerous: *flit* 1200, *flush* 1300, *fling* 1300 (with the *-ing* of *swing*), *flap*, orig. 'slap' 1330, *flash* 1387, *flack* 'flap, flutter' 1393 (obs. in StE), *flacker* 13.. (obs. in StE), *flick* 1447, *fluster* 1422, obs. *flatter* 'float, flutter' 1375 with variant *flitter* 'flit, flutter' 1542, *flirt* 1553, *flip* 1594, *flop* 1602, *flurry* 1698, *flump* 1790, *flunk* 1823 (the symbol plus *funk* 'fight shy of'). *Flare* in sense 'shine, glare' is the symbol blended with *glare*, but otherwise the etymology of the word is not clear (it is first rec. about 1550). The sb *flag* 1530 is prob. a variant of *flack* vb.

7. 57. /fr/ can hardly be called a symbol though it is an initial with several symbolically coined words. *Frizz* 1835 and *frizzle* 1839 'make a sputtering noise in frying' are variants of *fizz, fizzle* (perh. influenced by *fry*). *Fridge* 'fidget, chafe, rub' etc. 1550 is a variant of unexplained *fidge* 'fidget, twitch' 1575 (partly influenced by *fray*). In *frump* 'sulk; derisive snort' 1553 we have the final symbol *-ump*, but the initial seems arbitrary, unless it is emotionally expressive. *Fribble*, orig. 'falter, stammer, totter in walking' 1627 has the *-ibble* which seems symbolic for small, continuous sounds or movements (*nibble, dribble*), but the /fr/ is app. arbitrary. So is the initial of rec. AE *fram* 'pound, beat' (ADD, 1933). I cannot explain *frazzle* 'unravel' etc. 1825 (the OED connects the word with *fasel* 'unravel' for which it has, however, no quotation after 1643).

7. 58. /θ/ and /θr/ have formed a few words, as *thunder* OE, *throb* 1362, *thrum* 1553. *Thud* 1513 is orig. Sc. with meaning 'gust of wind'; in sense 'thump' it is first recorded 1787.

7. 59. /w/ is an initial symbol with words denoting unsteady, uncertain, to and fro motion. By the side of OE *wagian* 'oscillate, shake' (which resulted in now obs. *waw*), there seems to have existed an intensifying *waggian* which is recorded through *wag* 'shake, oscillate' 1225. Variations of the stem are found in *wiggle* 1225 and *waggle* (recorded 1594, but probably older). *Waddle* (now phonetically isolated) 1592 is explained by OED as a *-le* derivative from *wade*. This does not, however, account for the 'swaying', nor does it explain the absence of the element 'walking through water' which has been the only sense of the word *wade* since ME. I therefore think that *waddle* arose from a blending of *wag* (*waggle*) and *straddle* 1565 (orig. 'spread the legs wide apart in walking'). *Wobble* 1657 is perhaps *waggle/hobble* (OED suggests connection with dial. G *wabbeln*) while dial. *wangle* 'walk unsteadily' 1820 is a blend of the /w/ of this group and final *-angle* (as in *dangle*). *Wangle* 'obtain in some irregular way' 1888 is not the same word, though it must have originated in a similar way, probably as *waggle / dangle* (*waggle* so that it comes loose, dangling).

7. 60. /wr/ is the *r*-variant of /w/ and occurs with many old words expressive of the idea 'twist, distort', as *wrench, wrest, wrestle, wring, wrinkle*, all OE. By the end of the ME period, [wr] had become [r]. The only clear English coinage, however, seems to be *wriggle* 1495 (/wr/ *-wiggle*) which OED explains as "a. MLG *wriggeln*".

7. 61. /sw/ is an initial of many words with the basic meaning 'sway, swing', as *sweep, swing, swingle* sb, OE *swāpan* 'sweep', *swengan* = ME *swengen* 'smite'. It is obviously a variant of /w/ which will explain the etymology of several words. The now dialectal word *swag* 'move unsteadily, sway, wag (the head)' 1530 which the OED cannot explain is prob. a variant of *wag*. *Sway* 1300, orig. meaning 'move', is app. a variant of OE *wegan* 'move' (the modern sense of sway appears about 1500). ME and later coinings are *swap* 'smite, strike' 1350 = obs. *swip* 1205, *swirl* 1425, *swagger* 1590 (frequ. of *swag*), *swinge* 'brandish, whirl, flog' 1548 (a variant of older *swengen*), *swash* 1528 (orig. as sb with meaning 'pig-wash', i.e. obviously only a playful variant of *wash*; in other senses associated with the symbol /sw/), its ablaut variants *swish* 1756 and *swoosh* 1867. *Swank* 'swagger' 1809 is somehow connected with the group, but the etymology is not clear (it may be G *schwanken*, adopted as a slang term). Dial. variants of *sweep* are prob. *swoop* 1544 (cp. OE *swāpan*) and *swipe* 1825.

Swerve is OE *sweorfan* which had, however, the meaning 'file, scour'. The present-day sense is first recorded 1330. The OED presumes that the sense existed in OE "since there is no known foreign source to account for it". The nuance is possibly due to the symbolic force of /sw/ (cp. *he swung aside, he swung round*).

Switch is first recorded as a sb in sense 'whip' 1592. The word is app. onomatopoeic, but not suggestive of another English word. It may be a loan from Low German (in my home dialect (Krefeld) we have a word *witsch* 'whip'; E *switch* may be the *s*- variant of some similar word).

Several /sw/ words have or once had the meaning 'drink, tipple', as *swig* 'drink, liquor' 1548, also as a vb, *swinge* (in sense 'drink' has quotations in the

OED between 1529 and 1649), *swink* (quotations between 1550 and 1590), *swipe* 1825 and *swizzle* 1813. The origin of this nuance is either to be sought in the idea of the movement of the arms when lifting a glass or in the association with the word *swallow* (which is less probable).

7. 62. /tw/ is an initial occurring with several words denoting small sounds or small, chiefly twisting, movements. Many words denote tremulating sounds of birds or such as are caused by the plucking of an instrument, as *twitter* 1375 = *twiddle* 1863, *tweedle* 1684, *twang* 1542 (with dial. variant *twank* 1711), *twingle-twangle* 1634, *tweet* 1845. Dial. *twattle* 1573 and obs. *twittle* 1577 'babble, tattle' are variants of *tattle*, *tittle* with the /tw/ symbol, while *twaddle* 1782 is a variant of *twattle*.

After *twitch* and *twick* (which is now dial.) 'pluck', *twinge* 'twitch, pinch', *twinkle* 'sparkle, glitter' OE, *twist* 1340 have been coined *twirl* 1598, *tweak* 1601 (app. the long vowel variant of *twick*; the spelling is no proof that the word was ever pronounced with [æ]; cp. *cleave*, *streak* and Jesp. I. 3. 245). *Twiddle* 1540 is orig. recorded in sense 'to trifle', prob. under the influence of *fiddle*, or of *twittle-twattle* 'idle talk'); the senses 'twist, twirl' are quite modern (1676).

7. 63. /kw/ is initial with several words suggestive of the idea 'quake, quiver, shake', as *cweccan* 'shake, obs. quetch', *quake*, *cweorn* = *cwyrn* 'quern, handmill for grinding grain', all OE, *cwavien* 'quave, quake' 1225, *quaver* 1430, its ablaut var. *quiver* 1490, *quag* 1579 (through *quagmire*), variant of *quake*, *quash* 'shake, crush, quell, splash' etc. 1387 (cp. P. Pl. C. XXI. 64 *The erthe quook and quashte*, q. OED s.v. *quash*).

A few words suggestive of harsh bird sounds are introduced by /kw/, as *quack* 1617 = *quackle* 1564—1578, *qua-bird* 'the Night-Heron of N. America' 1789.

7. 64. /skw/ is the s- variant of /kw/. It introduces words expressive of discordant or discordantly eruptive sound, as *squeal* 1300, *squeak* 1547, *squash* 1565 (cp. *quash*), *squall* 'scream discordantly' 1631 (var. of *squeal* which was prob. never [æ] as the spelling variants of the OED seem to point out, so *quall* was coined on the basis /i-ɔ/), *squish* 1647 (var. of *squash*) and its var. *squidge* 1897, *squitter* 1596, *squirt* 1460 (the symbol plus *spirt*), *squawk* 'cry with a harsh note' 1821, *squirk* 'half suppressed laugh; squeak' 1882.

Words denoting movement are *squirt* (see above), *squabble* 'wrangle, brawl' (with -*abble* denoting noise or confusion, see -*abble*, cp. also LG *kabbeln* 'quarrel'), *squirr* 1710 (cp. *skirr*, *whirr*), *squiggle* 1804 (cp. *wriggle*), all implying violent or distorted movement.

7. 65. /h/ occurs with several sound words, many of them exclamations, as *ha*, *ho*, *hoop*, *heh*, *heigh*, *heigh-ho*, *hee-haw*, etc., *hoot* 1225, *hum* 1300, obs. *humble* 'hum' 1384, *hiss* 1388, *hush* 1400, *howl* 1450, *hizz* (var. of *hiss*) 'make a whizzing noise' 1583, *honk* 1843.

It is found also with words expressive of sudden, jerky movement, prob. orig. simply imitative of the breath-taking of persons lifting a heavy object with a sudden jerk. Obviously symbol-coined are *hop* OE, its ablaut variant *hip* 1250, *hobble* 1300, *hack* 1200, its var. *hag* 1400, their frequentatives *hackle*

1579 and *haggle* 1583 'cut, mangle by cutting', *higgle* 1633 (ablaut var. of *haggle*), *hitch* 1440 (with the *-itch* of *twitch*), *hug* 1567 (with the *-ug* of *tug, rug* 'pull forcibly'), *huff* 1583 'puff, swell' etc.

This initial is frequent in rime-gemination, but only with the first-word: *humdrum* 1553, *helter-skelter* 1593, *hubble-bubble* 1632, *hurdy-gurdy* 1749 a.o.

7. 66.   /hw/ is an initial with words denoting noises of air or breath or forcible movement. Originally it probably renders the sharp sound of breath at the beginning of a vocal sound or of forcible movement and is thus somewhat parallel to /h/. For many speakers, /hw/ is no longer distinct from [w], so coinages of this group would belong in 7. 59. However, even for those speakers /hw/ has graphemic value, which has induced me to treat this initial separately. OE are *whine, whistle, whisper*; later are *whirl* 1290, *whip*, orig. 'move the wings briskly' 1250, *whoop* 1400, *whirr* 1400, *whop* 'cast, strike' 1400, *wheeze* 1460 (cp. *sneeze*), *whew* 'whistle' 1475, *whisk* 1480, *whish* 1518, *whimper* 1513, *whinny* 1530 (var. of *hinny* 1400 which is perh. partly fr. F *hennir*), *whizz* 1547, *whiff* 'puff, whistle' 1591, *whiffle* 'blow in puffs' 1568, *whoop* 1568, *whoo* 1608, *whicker* 'snigger, titter' 1656, *whack* 1721, *whoof* 'gruff cry' 1766, *whang* 'beat' 1684 (Sc.), expressive of sound in StE 1844, *whing* 'move with great force' 1882, *whuff* 'sound of a forcible blast of breath of wind' 1896, *whoosh* 'dull, soft, sibilant sound' 1856, *wheep* 'long-drawn sound of a steel weapon drawn from its sheath' 1891, *whit* 'sound of a bird' etc. 1833, *whing* 'high-pitched ringing sound' 1912 (var. of *whang*).

7. 67.   /m/ is found initial 1) with a number of words denoting movements of the mouth, usually accompanied by muttered sounds, 2) with words expressive of or connected with feelings characterized by a particular position of mouth or lips, and 3) with some words denoting animal sounds where the *m* is, so to speak, an anthropomorphic imitation (cp. initial /p/ and /b/). Exs are 1) *murmur* 1400 (which need not be considered "a. F. murmurer" (OED), cp. also OHG *murmurōn*), obs. *murr* 'a form of catarrh' 1420—1756, *mutter* 1388, *mumble* 1362, *mum* 1377, *munch* 1374, *mump* 1586 (partly belonging in 2), at the same time) 2) *mop* (in *mop* and *mow* 'make a grimace'), *mope* 'be listless' 1590, (prob. the variant of *mop*, although the OED denies the connection), *miff* 'fit of ill-humor' 1623. *Miminy-piminy* 1815 belongs here, /mɪ/ imitating the affected making of a "mouth" (in Turkish there is a similar expression for the same idea: [mɪrɪŋkɪrɪŋk]) / 3) *mew* 1325 'utter the sound [mju]', *moo* 1549, *miaow* 1632.

Mizzle 'drizzle' 1483 has the final symbol of *drizzle* while the /m/ is perh. that of *mist*. There is only the drawback of chronology as *drizzle* is not recorded before 1543, acc. to OED.

7. 68.   /sn/ is initial with words expressive of sound and movement in con-nection with the mouth, nose or face. The starting-point is such words as OE *snofl, sniflung* 'mucus of the nose', *snȳtan* 'snite, clean the nose'. *Snout* is not recorded before 1220 but must have existed in OE as the denominal verb *snȳtan* shows. The following are recorded later: *snatch* 1225 (the symbol plus *catch*), *snack* 1300 (the symbol plus *-ack*), *snap* 1495 (the symbol plus final symbol *-ap*), *sniff* 1340, *snore* 1330 (as a vb 1400), *snort* 1366 (with in-

tensifying sf -*t*, as in *grunt, fart* etc.), *snot* 1388 'mucus of the nose, snuff of candle' (in OE repr. through *gesnot*), *snivel* 1325 (in OE repr. by the vs *sniflung*), *sneeze* 1499 (certainly not "due to misreading or misprinting" (OED), but an adjustment to the symbol /sn/ from OE *fnēosan*), *sneer* 1553 (plus *jeer* 1553, see initial /dž/), *snuff* 1527, *snarl* 1589 which is the intensive of obs. *snar* 'snarl, growl' (1530—1596), *snicker* 1694, its variant *snigger* 1706, *sniggle* 1815, *sniffle* 1819. *Snip* 1586 is either the *s*- variant of *nip* 1393 or the ablaut variant of *snap*; *sneap* 'nip, pinch' 1588 may be a dialectal variant of the same. *Snick* 'snip, nick' 1700 is the *s*- variant of *nick* 1523, influenced by *snip*.

7. 69. /sl/ is initial with many words expressing falling or sliding movement, as *slide, slidder* OE, OE *slēfan* 'cause to slip' = ME *sleven* (—1513). With the /sl/ of these were coined *slither* 1200 (var. of *slidder*), *slive* 1410 (var. of *sleve* fr. OE *slēfan*), *slip* 1300 (see -*ip*), *slouch* (1556 through *slouch-eared*, though other verb forms occur much later; the word is possibly a blend of the symbol and *crouch* 1394), *slump* 1677 (see -*ump*).

The same initial occurs with words denoting a falling blow, as *slay, slaughter* OE, OE *slītan* 'slit, split'. Symbol formations of this class are *slit* 1205, *sling* orig. 'hurl, throw' 1290 (see -*ing*), *slash* 1382 (see -*ash*), *slap* 1632 (see -*ap*), *slam* 1691 (see -*am*), *slog* 1853 'strike hard' (the symbol plus *flog*).

A third group of words contains the basic idea 'slimy, slushy matter', repr. by *slime, slough* 'muddy ground', *slip* 'soft, semiliquid mass, curdled milk' etc. OE. *Slop* 'muddy place' etc. 1400 is a var. of *slip*; *slobber* 'slime, slush' 1400 is another variant. Later are *slub* 'sludgy mud' 1577 (dial.), *slush* 1641, *sludge* 1641 and its var. *slutch* 1669 'slush, mud', *slosh* 1814, *sloppy* 'splashy, semiliquid' 1727.

7. 70. /r/, in OE also /hr/, introduces a number of words expressive of loud, noisy or noisily vibrating sounds, as OE *hrætele* 'rattle', *hrūtan* 'rout, snore', *rārian* 'roar'. In *ring* fr. OE *hringan* the idea of 'clear sound of hard metal' is the earliest recorded. The initial has chiefly formed words with the first nuance, but there are also a few coinages denoting a crisp or hard sound. Exs are *rap* 1340, *ram* 1330 (see -*am*; the OED thinks of der. fr. *ram* 'male sheep'), *rumble* 1384, *rustle* 1398, *rabble* 'speak in a rapid, confused manner' 14. ., obs. *rough* 'cough' 13. ., *ruckle* 'rattle in the throat' 1530 (the OED assumes Scand. origin), *rat-tat* 1774, *rub-a-dub* 1787 and *row-dow-dow* 1814 (as an imitation of the sound of a drum), *row-de-dow* 'din' 1848, *razzle-dazzle* 1890.

Rash 'dash, rush' 1400 has the final symbol -*ash* while the initial may be that of *run*. *Rush* 1375 seems to be a variant of *rash*, one of the earliest meanings is that of 'rush, dash' (for parallels of this ablaut cp. *dush* 13. . = *dash* 1290, *lush* 1330 = *lash* 1330, *crush* 1398 = *crash* 1400). The OED derives the word from OF *rëuser* which, according to Bloch, is L *recusare*. The *s* repr. [z], and if Anglo-French has the form *russher* this is obviously so because sound symbolism has played a part. Thus, there seem to be two elements, OF *ruser* plus the symbol -*ush* in obs. sense 'drive back, force out of position', and *rush* = var. of *rash*. Cp. also final symbol -*ush*. *Rip* 'cut, pull, tear' etc. 1477 appears to contain the final symbol -*ip*, but the initial is not clear.

Rollick 1826 is possibly a blend of *romp* 1709 and *frolick* 1538. The word *racket* 1565, orig. 'disturbance, loud noise, uproar' etc. is explained by the

OED (s.v. *racket* sb.[3]) as "prob. onomatopoeic". As for *rack-*, it might be symbolic, but the *-et* cannot be accounted for. Derivation from Gaelic *racaid* (which the OED thinks is itself derived from the English word) is more plausible.

7. 71. /s/ is an initial with several words expressive of frictional noise, chiefly such as are caused, by the intake of breath or the sipping, dripping or trickling of liquids, as *suck, sigh, soak, sup, sop, sipe* 'ooze, drip' etc. OE. Later symbol words are *sob* 1200 (prob. a var. of *sop*), *sip* 1386 (another var. of *sop*, or of *sup*, all representing the same "root"), *seep* 'ooze' 1790 AE (variant of *sip* with the long vowel expressive of the slow oozing). Hissing noises are expressed in *siss* 'hiss' 13.. (now AE and E dial.), *sizz* 'burn, brand, hiss, sizzle' 1700, *sizzle* 1603.

Souse 'heavy blow, thump', as a vb 'strike' etc. 1480 may be an echo word, as the OED supposes, but it is not suggestive of English symbols. It has possibly helped in the coining of *sock* 'beat' (*souse* plus *knock*) 1700.

7. 72. /z/ is an infrequent initial. *Zigzag* 1712 is a loan from French. English coinages are *zip* 1875 (see *-ip*), *zoom* 'make a continuous low-pitched, buzzing sound' 1886, in aircraft slang also with meaning 'aircraft's steep climb' 1917. ADD quotes *zoon, zune* 'go or run fast with a hum or buzz' 1886.

7. 73. /š/ has not been very productive. Obs. *shag* (1380—1572) 'toss about, shake' and *shog* 'shake, rock, jolt' 1388 are variants of *shake* OE, as is prob. also *shock*. In sense 'move swiftly and suddenly' the latter is obs. now. The OED quotes it as *shock* v.[1] against *shock* v.[2] 'collide' etc. which is rec. from 1576 and for which the OED assumes F *choquer* as the etymon while it leaves the question of etymology open for *shock* v.[1] Both senses are, however, explainable from *shock* var. of *shake* (though influence of F *choquer* is probable, at the same time). OE *scacan* is somewhat parallel: it meant 1) 'move quickly, flee', 2) 'quiver, quake, tremble', trans. 'flourish, brandish, wave'. *Shamble* 'walk unsteadily' (17th c.) is prob. *shake* plus *-amble* (see *-amble*). The OED derives the word from *shamble* 'stool' via *shamble legs* (1607); but why should the legs of a shamble tremble or be unsteady? Obs. (exc. dial.) *shail* 'stumble, shamble' 1400 is possibly *shake, shamble* plus *fail* 1225, *quail* 1300.

The initial is emotionally expressive in the exclamation (sb, vb) *shoo* 1483 (used to frighten or drive away birds or poultry).

7. 74. /tš/ is obviously emotionally expressive, like its variant /dž/. It introduces various words expressing sound—the vocal sounds of small animals, esp. birds, metallic or glass sounds, human sounds, and a few others. The words denoting movement are originally imitative of the accompanying sound. The symbol is not older than ME. The historical basis of the sound is OE palatal [k], as in *cearcian* 'chirk', *cirman* 'chirk' (? *cēowan* 'chew'), *cēo* 'jackdaw', now *chough* 'crow'.

ME and later symbol coinages are *chatter* 1225, its ablaut var. *chitter* 1386, *chat* 1440, *chit-chat* 1710, *chap* 'crack' 1325 with ablaut var. *chip* 1330 and *chop* 1362 (*chap* 'jaw' 1555 is prob. the same word, after the sound), *chime* 1340, *chink* 1581 (used of metal or glass), *chirp* 1440 = *chirrup* 1579 = Sc. *chirt* 1386, *chirr* 'trill like a grass-hopper' 1639, Sc. *chirl* 'warble' 1818, *chuck* 'cluck' 1386, *chuckle* 1598, *cheep* 1513 (chiefly Sc., used of birds and mice),

chipper 'twitter, babble, chatter' AE 18.., obs. *chit* 'name of a bird' 1610, *chiff-chaff* 'name of a bird' 1780, *chink* 'fit of coughing' 1767, *champ* (with AE var. *chomp, chank*) 'chew' 1530, *chug* 'sound of oil-engine etc. when running slowly' 1897. *Chuck* 1583 is a variant of *shock* (the original form is *chock* with the /tš/ perh. influenced by *chin*; the earliest quoted sense is 'give a gentle blow under the chin'), *chuff* (for sound of engine).

7. 75. /dž/ is the voiced variant of /tš/. It is app. emotionally expressive (the initial occurs in Turkish, for instance, with symbol coined words, also in Old French). No coinages occur before about 1300. *Jangle* 1300 'chatter, babble; dispute, wrangle' appears to represent OF *jangler*; the symbol *-angle* is not suggestive of the senses; with meaning 'jingle harshly'(1494) the word is, however, a var. of *jingle* 1300. Then come *jabber* 1499 'gabble' etc. (the *-abber* offers some difficulties as the symbol has formed no other words, except the more recent *gabber*; it is, however, prob. a variant of *-abble*), *jowl* or *joll* 'toll (a bell), bump' 1520, *jumble* 1529 (orig. 'make a rumbling noise'), *jump* 1511 (originally denoting the accompanying noise; cp. the exclamation for a fall into water in Turkish *cump* (pron. [džump]) 'plump', *jar* 'make a harsh grating sound' 1526 (cp. *gnar, snar*), *jug* 'imitation of one of the notes of the night-ingale' 1523 (cp. *chuck, chug*), *gibber* or *jibber* 1604 (ablaut var. of *jabber*), *jam* 1706, *jazz* 1918 (Judah A. Joffe in WORD 3. 105/106 derives the word from F *ça jase*. Many etymologies have been suggested, but if Joffe is right, the word received the symbol /dž/. The French word has [ž], a fact which the author seems to have overlooked).

There are a number of words implying jerky movement, as *jag* 'pierce, prick' etc. 1440, also as a sb in several variants of the semantic basis 'sharp projection', *jog* 1548 'shake with a jerk' (cp. *shog*), its frequ. *joggle* 1513, its ablaut variant *jig* 'lively dance' etc., also as a vb (1560), *jiggle* 1836 'move backwards and forwards', *jigger* 1867 'make a succession of rapid jerks', *jigget* 1687 (infl. by *fidget*) 'jig, hop, skip about', *jerk* 1530, *jink* 'jerk, quick turn' 1700 (in second world war used for maneuvering aircraft) | *job* 1490 with var. *jab* 1825 'stab, prod, poke' etc., *jib* 'pull a sail' 1691. *Jounce* 1440 is prob. formed with the /dž/ of the above sound group and the *-ounce* of *bounce* 1225.

Many etymologies have been offered for the word *jeer* 1553. It may be a blend of *fleer* 1400 'jeer, sneer' and *jest*. *Jest* sb (fr. OF *geste*) developed the following senses: 'feat, tale of a feat, idle tale, jeer'. The vb *jest* 1526 means 'jeer'.

7. 76. /j/ is a frequent initial with words expressive of vocal sounds, as *yell, yelp, yex, yesk* 'sob, hiccup, belch' OE. Later are *yo-ho* 1300, *yow* (excl) 1440, *yowl* 1450, its var. *yawl* 13.. (cry of pain, grief, distress), *yawp* 'yelp, cry harshly' etc. 13.., *yammer* 1481, *yap* 'bark sharply' 1668, *youf* 'bark' 1682, *yaffle* (a dial. name of the green woodpecker), *yah* (excl. of disgust etc.) 1812, *yaw-haw* 'guffaw' 1836, *yaw-yaw* 'talk affectedly' 1854, *yoho* (excl. to call attention) 1769, *yoicks* (fox-hunting cry urging on the hounds) 1774, *yoop* (sound of convulsive sobbing) 1848, *yow* 'cry of a cat or dog' 1820, *yep* 'a call to urge a horse' 1690. *Yip* 1440 in sense 'cheep as a young bird' is termed "obs. or dial." in OED, but the word is alive in AE with meaning 'yelp', acc. to OED first rec. 1907. Its variant *yipe* is not rec. in OED or Spl., but the word is common in AE. *Yatter* 'gabble, chatter' is not recorded before 1866.

Final symbols: rime derivation

7. 77.   Rime plays a great part in language, as has been observed in connection with the coining of geminated words (see VIII). But its part is obviously more important than has hitherto been recognized. In this chapter I shall deal with rime as having played a part in the derivation of symbolic words. Words may be derived from others as their riming counterparts, distinguished from them by the initial only.

I have arranged the material according to spelling. The alphabetical order makes the reading of it more convenient as there is no established order in the sequence of phonetic symbols. Most of the words listed are also treated under their respective 'initial symbols' in a more detailed manner.

7. 78.   -ab: *dab* 1300, *stab* 1375 Sc, 1530 StE, *jab* 1825 (strike, thrust).

-abble: *babble* 1230, *rabble* 14.. 'speak in a rapid, confused manner', *gabble* 1577 'talk volubly'.

-ack: *crack* OE, *brack* 1200 'noise, outcry' (obs.), *clack* 1250 'chatter, prate, cluck, cackle', *snack* 1300, *smack* 1530 orig. 'kiss noisily', *thwack* 1530 'beat soundly', *quack* 1617 (said of ducks), *whack* 1719 'thwack' etc., *flack* sb 1823 'slap, blow' (dial.).

-addle: *straddle* 1565 'stride about' etc., *paddle* 1530 'walk in shallow water' (obviously a variant of *puddle*), *waddle** 1592.

-aggle: *draggle* 1513 (see /dr/) attracted *daggle* 1570 on the analogy of *dabble/ drabble*.

-am: *lam* 1595, *clam* 1674 'clang of bells', *slam* 1691, *jam* 1706, *flam* 1796 'signal of drum', (partly) *ram* ME, *wham* 'slam, bang' AE, not in OED or Spl.

-amble: expressive of unsteady to and fro movement may have originated in the loan *amble* 1386. Later are obs. *famble* 14.. 'stammer, stutter' (var. of *fumble*), *wamble* 1420 'turn and twist the body about' (now dial.), *scramble* 1526, *scamble* 1539, orig. 'scramble' = *shamble* 1681 'walk unsteadily', *ramble* 1620 'wander, travel'.

-amp: *stamp* 1200, *tramp* 1388, *champ* 1530 'chew'.

-ang: *pang* 1526, *bang* 1550, *twang* 1542, *tang* 1556, *clang* 1576, *spang* 1513 (Sc and north. BE 'spring, leap', orig. used of the bow or arrow), *whang* 1684.

-ank: *clank* 1614, *spank* 1727, *crank* 1827 'jarring sound'.

-ap: *clap*, *tap* 1225, *chap* 1325, *flap* 1330, *rap* 1340, *snap* 1495, *swap** 1350, *slap* 1632, *yap* 1668, *plap* 1846.

-ar: *gnar* 1496 'snarl', obs. *snar* 'snarl' 1530, *jar* 'make a harsh, grating sound' 1525.

-arl: *snarl* 1589 (-*l* extension from *snar*), obs. *gnarl* 'snarl' 1593.

-ash: *dash* 1290, *lash* 1330, *flash* 1387 (orig. chiefly said of water), *pash* 'dash, smash' 1362, *crash* 'gnash, dash, smash' 1400, *slash* 14.., obs. *rash* 'dash' 14.. (chiefly Sc), *gnash* 1496, *clash* 1500, *plash* 1513, *swash** 1528 'fall of a heavy body', and *squash** 1565, *gash* 1565, *quash** 1609 H, *bash* 1641 (orig. used of a hen, then generally 'strike with a heavy blow'), *splash* 1715, *smash* 1778.

-at: *bat* sb 'stick' 1205, vb 'strike' 1440, *pat* 1400, *chat* 1440, *rat-tat* 1774, *spat* 'start up sharply' etc. AE 1809, *splat* 'pat, slap, spat' 1941 (ADD).

-atter: *clatter* OE, *chatter* 1225, *batter* 1325, *patter* 1394 (at the same time representing *pater* 'paternoster' = 'recite prayers'), *hatter* 'bruise with blows' 1450 (now Sc and north. B dial.), *smatter* 'prate, chatter' 1440, *splatter* 1784, *yatter* 'chatter' 1866.

-attle: *rattle* OE (in *hrætelwyrt* 'rattle-wort'), *tattle* 1450, *prattle* 1532, *twattle** 1573 (no longer in this group).

-awl: *sprawl* OE, *crawl* 1300, *scrawl* 1380, *spawl* 'spit coarsely' 1598 (arch.), *drawl* 1652 H (words for drawn-out or clumsy movement). Sound-words are *yawl* 13.. 'cry of pain, grief', *brawl* 1375, *bawl* 1556, *drawl* 1597.

7. 79. -eak: *creak* 1325, dial. *shcreak* 1500, *squeak* 1547, dial. *peek, peak* 'squeak' 1808.

-eep: *peep* 'cry of young birds' 1460, *cheep* 1513.

-eer: *fleer* 1400 'jibe, jeer, sneer' (prob. a Scand. word, cp. dial. *flire* 'grin' (see OED *fleer* v.), *sneer* (see initial /sn/) 1553, *jeer* 1553 (see initial dž).

-eeze: *sneeze* 1499 (see initial /sn/), *wheeze* 1460.

-ick: *pick, prick* OE, *kick* 1380, *tick* 1430, *flick* 1447, *nick* 1523, *click* 1581, *snick* 'click' 1700, *crick* 'sound of a grasshopper' 1601 (perh. also in sense 'spasm of the muscles' 1440).

-iddle: is found in several words denoting 'trifle' of which the basis may be *fiddle* which in this particular sense development is first recorded 1530. Other words coined after it are *piddle* 1545, *tiddle* 1560, *twiddle* 1540, *quiddle* 1567, *diddle* 'sing without distinct utterance of words' 1706, *diddle* (away) 'trifle (away), waste' 1826.

-iff: *sniff* 1340, *whiff* 'puff, whistle' 1591, *tiff* 'outburst of temper' 1727, *miff* 'huff, tiff, petty quarrel' 1623, *biff* 'blow' 1890 (ADD), obs. *tiff* 'drink, sip' (influenced by *tipple*), cp. also *squiffy* 'drunk' 1874. The common denominator is 'noise of breath or liquor'.

-iggle: the symbol is found with words expressive of small, continuous movements or sounds, as *wiggle* 'wobble, waggle, wriggle' 1225, *wriggle* 1495 = *squiggle* 1804 = *scriggle* 1806, *sniggle* 'snicker' 1815.

-ing: as imitative of sound it underlies *ring, sing* OE, *ding* 'knock, hammer' 1300 (arch.), *ping* 1886, *whing* 1912 'word for a highpitched ringing sound'. Words denoting movement are *swing* OE, *sling* 1290, *fling* 1300, *whing* 1882 'move with great force or impetus'.

-ingle: *jingle* 1300, *tingle* 1388, *dingle* 1573.

-ink: *tink* 1382, *clink* 1386, *chink* 1581.

-ip: *clip* 'cut' 1200, *whip* 1250, orig. 'move (the wings) briskly', *hip* 'hop' 1250, *skip* 1300, *nip* 1393 (variant of obs. *gnip, knip*), *tip* 1466, *flip* 1594, *snip* 1586, *flip* 1594, *zip* 1875. The common denominator is 'quick movement'. Some words are at the same time ablaut variants of words with other vowels and are thus doubly connected.

-irl: *whirl* 1290, *swirl* 'whirlpool' 1425 (orig. Sc), *chirl* 'warble' 1818 (Sc).

-irr: *whirr* 1400, *skirr* 1548 'move hastily, make a whirring sound', *chirr* 1639 'trill like a grasshopper', *squirr* 1710 'cast with a whirling motion'. All express quick movement or whirring sound.

-irt: *squirt* 1460, *flirt* 1553, orig. 'fling', *spirt* 1570 (cp. *-urt*).

-isk: *whisk* 1480, *frisk* 1519 (the initial perh. from *freak* which is not recorded before 1563 but may be older; cf. OE *frician* 'dance'), dial. *flisk* 1596 'caper, frisk'.

-iss: *siss* 13.., *hiss* 1388.

-it: *spit* OE, *slit* 1205, *flit* 1200, *hit* 1450, *skit* 1611 (quick movement). Cp. also F *vite* (the earliest recorded form *viste* is a different sound-symbolic 'root'). The symbol /yt/ or /üt/ is used in Bavaria, Denmark and Sweden to denote great quickness of movement or disappearance[1].

-itch: *twitch* OE attracted *hitch* 1440, *pitch* 1205, all suggestive of jerky movement.

-iver: *quiver* 1490 joined *shiver* 1200 (orig. *chiver*, of unexplained etymology, the [š] is 15th c., prob. after *shake*), the underlying idea being that of 'tremble, shake'. It is possible that *flivver* 1912 is a blend of *-iver* and *flunk*, the original meaning of the word is 'fail, bungle'. The sense 'cheap, shaking motorcar' also fits in semantically.

-izz: *whizz* 1547, *fizz* 1665, *sizz* 1700, *frizz* 1835 denote similar noises. The root of *blizzard* 1829 may be the same symbol plus the initial /bl/ of the 'blow' class.

-izzle: expresses continuous quietly sputtering noises, as of rain or fat in a pan: *mizzle* 1483 (the *m* from *mist* perh.) and *drizzle* 1543 (see initial /dr/) denote light, continuous rain (see OED s.v. *mizzle* v.[1] with a few LG and Du. exs to which may be added LG *fisseln* (pron. [z]). The noise of sputtering fat is expressed in *sizzle* 1603, *frizzle* 1839, *fizzle* 1859 H.

7.80. -oan: *groan* OE seems to have attracted *moan* which is recorded as a sb 1225. The verb is recorded much later (15th or 16th c.). The OE vb *mǣnan* 'moan' developed the deverbal sb *mene*, recorded 12.., last quoted in OED in a 19th c. text. The deverbal sb *groan* is not recorded before 1300 (as *gran*, *gron*), chiefly in cb *give a groan*. *Moan* sb is also chiefly found in phrase *make (one's) moan*, beside which the phrase *mean (one's) moan* is frequent in the 14th c. The drawback of my explanation is that *moan* is older (1225) than *groan* (1300); but perhaps this is merely due to an incidental gap in the existing material.

-ob: *sob* 1200 (perh. a variant of *sop*) attracted *throb* 1362.

-od: seems to be imitative of sound, underlying *plod* 1562, *prod* 1535 (with the initial of the 'prick' class), dial. *dod* 'beat' 1661, *pod* 'prod, poke' (now dial.) 1530.

-odge: is perh. a variant of older *-udge*, conveying the idea of heaviness, stuffedness: *podge* 1638 'walk heavily and slowly' (see *-od*), *stodge* 1674 'gorge, stuff' (see initial /st/), *podge* 1833 'short, thick and fat p. or animal', also used for things, its derviative *podgy* 1846.

-oll: sound words are *knoll* 1379 'sound of a bell', *toll* 1452, *jowl, joll* 1520 'toll (a bell), bump (the head)'. Expressive symbolism underlies *loll* (as Ekwall, English Studies 28, 108 shows, the word must have existed before 1100), *troll* 1377 (see initial /tr/; usually derived fr. OF *troller*, see OED

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[1] Cf. O. Jespersen, Lehrbuch der Phonetik[3], 89.

troll v.), its variant *stroll* 1603 (see initial /str/). The word *roll* 1375 is, however, OF *roler* (which passed into German also).

-omp: seems to occur only as a variant of *-amp* as I see it in the American word *stomp* 'beat down forcibly', as with the foot (see ASp 30. 287, 1955).

-onk: has formed the words *honk* 1843, *cronk* 'cry of the wild goose' 1878, perhaps also *conk* 'break down, give out, fail' 1918. The first examples recorded in OED refer to the dying of an airplane motor (*my engine began to conk a bit*).

-oom: *boom* (in this form 18th c.) 'buzz, make a deep, resonant sound' etc., *zoom* 1892 'make a low-pitched buzzing sound'. In aircraft slang *zoom* denotes the sudden steep climbing of the plane (first rec. 1917). *Boom* in sense 'boom of business' (1879 U.S.) is prob. the same word, the noise of booming was perh. connected with the noise of production machinery as the outward sign of the 'boom', just as the doubled activity and consequently doubled noise of the engine is indicative of the sudden climb of the plane.

-oop: *whoop* 1400, *roop* 'hoarse sound' 1674, *scroop* 1787 'creak, grate', *cloop* 1848 'noise of a cork'.

-op: *pop* 1386, *whop* 1400 'cast, strike' (prob. fr. the sound), *flop* 1602, *plop* 1833.

-ore: *blore* 1440 'a violent blowing', *snore* 1330 'a snort'.

-ouch: *couch* 1330 which is F *coucher*, attracted *crouch* 1394 and *slouch* (see initials /kr/ and /sl/).

-ough: *cough* 1325 = obs. *rough* 13...

-ounce: sound-imitative is *bounce* 1225 (in form *bunsen*; cp. *bum*, *boom*, OE *pūnian* 'pound', G *bums* etc.) which seems to have attracted *jounce* 1440.

-owl: *growl* (Wycl.), *howl* 1450, *yowl* 1450.

7. 81. **-udder:** *shudder* 1310 (from the Germanic root *skud*) attracted *dudder* 1658 'shudder, shiver' (ablaut variant of *didder*).

-uddle: the final occurs in several words which defy etymological explanation, as *cuddle, fuddle, huddle, nuddle,* so we cannot say whether the words are symbol-coined. But *fuddle* 1588 'confuse with drink' seems to be responsible for the sense development of *muddle* 'wallow in mud' to 'stupefy with liquor' 1687 H.

-udge: the starting-point of the symbol seems to be *grudge* 1450 'murmur, grumble, be reluctant, envy' which is the variant of now obsolete *grutch* 1225 (= OF *groncier, groncher,* which is likewise onomatopoeic). Somewhat later recorded is the word *drudge* (1494 as a sb, 1548 as a vb) which may be a blend of the symbol and *dree* 'labor' (OE *drēogan*). *Trudge* 1547 is the symbol with the initial /tr/. The symbol is obviously emotionally expressive of heaviness, unpleasantness or the like. Though *grudge* is not recorded before 1450, it may be older, which would account for *smudge* 'soil, smirch' 1450 as the symbol extension of *smut* (which in form *smot* is recorded as far back as 1387). *Snudge* 1545 'miser, niggard' may be from *snap, snatch* (money) plus the symbol. *Sludge* 1649 may be the symbol extension of *slub* 1577, *slush* 1641 (see initial /sl/). There are, however, other words in *-udge* which do not appear to belong in the group (as *nudge*

'push with the elbow', *fudge* 'fadge, fit in' etc., *snudge* 1633 'remain snug
and quiet'). A variant of *-udge* is app. *-odge* with a similar emotional value
(see *-odge*). Words in *-odge* are newer which would point to the influence
of the symbol *-udge*. *Pudge* 1808 is a by-form of *podge* 1833 'short and
thick p. or thing'.

-uff: is an onomatopoeic variant of *-iff* and symbolic of an outburst of breath,
   air or smoke: *puff* 1225 (perh. the var. of OE *pyffan*), *buff* 'burst into a
   laugh' etc. 1297 (obs. exc. dial.), *huff* 'puff, swell' etc. 1583, *snuff* 1527
   (the OED supposes Du origin), *whuff* 1896 'puff' = Sc *fluff* 1818 = Sc
   fuff 1513 = Sc *pluff* 1663, *guff* 'puff, whiff' 1825, *chuff* (denoting the
   noise of an engine or machine) 1921.
      The sb *buff* 'blow, stroke' 1420 is obviously onomatopoeic for the sound
   accompanying the blow (either the sound of breath or more probably the
   wind-like sound of the blow), as in G *puff* 'blow'. The sb *blow* 1460 shows
   as similar development. Though the OED rejects the etymology, the word
   is certainly the same as the vb *blow* (of wind). That the sb *blow* 'blast' is
   recorded later is no serious argument. The analogy of F *soufflet* (fr. *souffler*
   'blow') is an exact parallel. That *soufflet* is first rec. in sense 'instrument
   for blowing' (see Bloch s.v. *souffler*) does not prove the proposed etymology
   wrong. No one will derive one sense from the other, but both meanings
   have separately sprung from the idea 'souffler-blow'. A rime-variant of
   buff is *cuff* 'strike' 1530 (with the initial of *kick*).
      Bluff 1674, orig. recorded as a vb with the meaning 'blindfold', seems
   to belong here. It is possibly a variant of *buff* (a name given to the blind-
   folded player in the game of 'blind man's buff'), rec. 1647, with the *bl-*
   of *blind, blindfold*. The original sense would then be 'make a blindfolded
   buff of a p.'.

-uffle: the etymology of *ruffle* 1300 'crumple' etc. is not clear. With the under-
   lying idea of 'untidyness, disorderliness' it may have coined *shuffle* 1532,
   orig. 'put together in a hasty, disorderly manner' (as a blend with *shove*),
   of which *scuffle* 1579 in same sense in the /sk/ variant (see initial /sk/).
   The sb *scuffle* 'scrambling fight' 1606 is a semantic variant of the basis.

-ug: is a symbol with words denoting pulling movements. *Tug* 1225 (first
   with the spelling *toggen*, since 1300 *tug*) is prob. a variant of *tuck* 'tug,
   pull' (sense now obs.), recorded with this meaning since about 1300; the
   latter is the short vowel variant of OE *tūcian* 'ill-treat' etc. (i.e. the
   basis taken in an abstract sense). *Shrug* 1400, orig. meaning 'shudder,
   shiver' has the initial of *shrink*; *rug* 1300 'pull forcibly' is the north. BE
   and Sc variant of the symbol with the initial of *rock*, OE *roccian*. *Hug*
   1567 is the symbol plus the initial /h/ of exclamations (see initial /h/).
   Lug 13.. 'drag, pull' seems to belong here, but I cannot account for the
   initial [l] (the OED supposes Scand. origin, but there is no old Scand.
   word to support the etymology). *Chug* 1897, denoting the sound of an
   oil-engine etc. when running slowly, is a var. of *chuck* but at the same time
   suggests the jerky movement of the motor.

-um: a symbol for vibrating sounds has formed *hum* 1300, dial. *bum* 'hum
   loudly' 1450, obs. *bum* 'beat, thump' 1579, *drum* 1540, *thrum* 1553, *strum*
   1775, *tum* 1830.

-umble: is symbolic of indistinct humming or rumbling noises, as in *mumble* 1362, *rumble* 1384, obs. *humble* 'hum' 1384, *jumble* 1529, orig. 'grumble', obs. *drumble* 'mumble' (1579—1596), *grumble* 1586 (see initial /gr/).

Tumble 1300 is the frequ. of OED *tumbian* 'tumble, make somersaults'. With the basis of 'tumbling movement' it attracted *stumble* 1325 (see initial /st/; the OED supposes Scand. origin), *fumble* 1508 (see initial /f/).

-ump: is expressive of heavy fall and impact in *dump* 1300 'fall heavily', *plump* 13.., *jump* 1511, *thump* 1537, *bump* 1566, *crump* 1646 'noise of horses or pigs when eating', *clump* 1665 'tread heavily', *slump* 1677, *flump* 1790, *wump* 1897 'throb; sound of fall'.

It is emotionally expressive (of displeasure) in *lump* 1577 'be displeased' = *mump* 1586, *hump* 1673 'ill-humor', *frump* 'cross, old-fashioned woman' etc. 1817 (as a vb in sense 'put in a bad humor' 1862, in obs. sense 'sulk' 1693), *lump* 1577 'look sulky' (with the /l/ of *lour, lower*; in early quotations *lump* and *lower* form a set group), *drump* 'sulk' 1875 = dial. *glump* 1746 (with the initials of *grunt* resp. *glum, gloom*; *glumpy* 1730 is StE). In plural form are used *frumps* 'sulks', obs. *humps* and *grumps* 'slights and snubs'.

-unch: is imitative of sound in *munch* 1374 (see initial /m/) and *crunch* 1801 (see /kr/). There are many concrete sbs with the basic meaning 'lump' matched by counterparts in -*ump* (*bunch, hunch, lunch, clunch* / *bump, hump, lump, clump*); I do not deny their symbolism, but I would refer the reader to my remark above (7. 5.)

-unk: obs. *funk* 'spark' 1330 attracted *spunk* 1536 (with the initial of *spark*) 'spark', also 'tinder, touchwood' of which *punk* 1707 is the *s*- less variant.

Funk 'flinch' c 1740 is unexplained (first quoted as Oxford slang), but *flunk* 1823 is a blend of it and the symbol /fl/.

-url: is symbolic of prolonged vibrating, dull sounds (cp. *hurr* 'make a dull vibrating sound' 1398 and /l/ (7. 12). It has coined *hurl* 1300 and *purl* 1586.

-urry: the first recorded word of this group is *hurry* c 1590. The basis is obviously -*urr* as in *hurr*, the buzzing noise standing for the idea of agitated activity. I cannot, however, explain the -*y*. The word attracted the gemination *hurry-scurry* 1732 from which *scurry* separated as an independent word (first inst. 1810) and *flurry* 1698.

-urt: *spurt* 1570 is *spit* plus the vibrational -*urr* (as *spirt* 1582 is the simple *r*- variant of *spit*), followed by *blurt* 1573 (see /bl/). Today, -*urt* and -*irt* are graphic variants of the same symbol.

-ush: is a variant of -*ash*; it has formed *flush* 1300, obs. *lush* 'dash, strike' 1330, obs. *dush* 'dash' 14th c., *rush* 1375 (the word is generally considered to be AF *russher*, var. of *russer*), *gush* 1400. Obs. *frush* 13.. 'strike violently' is prob. OF *fruissier*. The initial /fr/ in English does not form words of this class, but *crush* 1398 is the symbol plus initial /kr/ (the OED derives it from OF *croissir* which has, however, the meaning 'gnash the teeth'). *Blush* 1325, orig. 'look' does not appear to belong here. The symbol is emotionally expressive in *tush* 1440, an exclamation of impatience. *Push* fr. OF *pousser* may have been influenced by the symbol, the [š] is otherwise difficult to account for.

-ustle: is originally imitative of sound, the *-le* symbolizing continuation, as in *rustle* 1389. The sense 'move rapidly' is first rec. 1586 in OED, and *bustle* c 1560 is perh. a var. of obs. *buskle* 1545 (fr. *busk* 1300) after it. *Hustle* 1684 is perh. *hurry* plus the symbol (the OED derives it from Du *husselen, hutselen* 'shake, toss'). In recent AE the words are all synonymous.

-uzz: imitative of sound it has formed *buzz* 1398 = *huzz* 1555 = obs. *fuzz* 1676. In a semantic variant it underlies *fuzz* in obs. sense 'make drunk' (so that the head buzzes), in another *fuzz-ball* 1597 (the accompanying motion being predominant). Its frequentative is *fuzzle* 'intoxicate' 1621 which is obs. in BE but is recorded in AE with the variant *wuzzle* (see ADD s.v. *fuzzle*).

Word-coining through ablaut modification

7. 82. The derivative principle here is sound symbolism as expressed by the root vowel. As many words are cross related, a good many will be found to have been mentioned in the chapter 'Initial Symbols'. Others have been treated under 'Final Symbols' as they enter the group of a final symbol at the same time (e.g. *tang* as a variant of *ting*, but also joining other words with the final symbol *-ang*).

The most frequent ablaut pattern is /ı - æ/, corresponding to older /ı - a/. Next comes /ı - ɒ/. But there are also other types as our examples show. Which word of the ablauting group is presumably original can usually be told from OED, but it should be noted that earlier or later occurrence of one or the other vowel is incidental to the derivative process (*tip* is more recent than *tap*, but *flicker* is older than *flacker*). Some roots have more than two ablaut variants.

/ı - æ/ *chitter* 1386 / *chatter* 1225, *clip* 1200 / *clap* OE, *clitter* 1528 / *clatter* OE, *dib* 1609 / *dab* 1300, *flick* 1447 / *flack* 'flap' 1393, *flicker* OE / *flacker* 13.., *giggle* 1509 / *gaggle* 1399, *grip* OE / *grab* 1589, obs. *gripple* 1591 / *grapple* 1580, *higgle* 1633 / *haggle* 1583, *jibber* 1824 / *jabber* 1499, *pribble* and *prabble* are first recorded as a pair 1598, *scritch* 1250 / *scratch* 1474, *scribble* 1467 / *scrabble* 1537, *snip* 1586 / *snap* 1495, *ting* 1495 / *tang* 1556, *tip* 1466 / *tap* 1225, *tittle* 1399 / *tattle* 1481, *whing* 1912 / *whang* 1844.

/ı - ɒ/ *drip* OE / *drop* OE, *hip* 1250 / *hop* OE, *jig* 1588 / *jog* 1548, *jiggle* 1836 / *joggle* 1513, *sip* 1386 / *sop* OE, *tip* 1225 / *top* OE (OED denies the obvious connection between the two words), *tit* 'term for a small object' 1548 / *tot* 'small child' 1525.

/ı - ɛ/ *clinch* 1570 / *clench* 1250, *glint* 1440 / *glent* 13.., *pick* OE / *peck* 1382.

/ı - ʊ/ historically speaking, we have the alternation in *sniffle* 1631 / *snuffle* 1583, *spirt* 1582 / *spurt* 1570, *spirtle* 1603 / *spurtle* 1633, *tick* 1440 / *tuck* 13.. (now dial., chiefly Sc, 'beat the drum'; see 7.29; OED derives it from ONF *toquer*).

/ʌ - æ/, corresponding to earlier /ʊ - a/: *cluck* 1481 / *clack* 1250, *dush* 13.. / *dash* 1290, *flutter* OE / obs. *flatter* 1375, obs. *lush* 1330 = *lash* 1330, *ruttle* (now dial.) 1400 = *rattle* OE, *sputter* 1598 / *spatter* 1582 (the former has auditory, the latter rather visual connotation), *splutter* 1677 / *splatter* 1784. Cf. also *bluster* 1434 and *blast* 1300. The verb *paddle* 1530 is obviously

a variant of *puddle* 1440, while *rugged* 1330 seems to belong to *ragged* 1300.

/æ - ɒ/ *champ* 'chew' 1530 = A dial. *chomp*, *gabble* 'jabber' 1577 / *gobble* (said of a turkey cock) 1680, *jab* 1825 = *job* 1490, *plap* 1846 = *plop* 1833, *splash* 1715 = *splosh* 1818, *tot* 'child' = A dial. *tat*, *tad*.

/ʌ - ɒ/ occurs in *tush* / *tosh* (exclamation), *pudge* / *podge* 'short and thick person', *putter*/ *potter*.

Quantitative differences of vowel underlie *crack* OE / *crake* 1386, *scritch* 1250/ *screech* 1560, *titter* 1400 / *teeter* 1846, *sip* 1386 / *seep* 1790, while *twick* 'twitch' OE / *tweak* 1609 belong here only synchronically. A similar quantitative-qualitative opposition relates *quiver* 1490 to *quaver* 1440.

Many expressive roots have several variants: *clitter* 1528 / *clatter* OE / *clutter* 1556, *click* 1581 / *clack* 1250 / *cluck* 1481, *blab* 1656 / *blob* 1536 / *bleb* 1607, *chip* 1330 / *chap* 1325 / *chop* 1362, *crick* 1601 / *crack* OE / *crake* 1386 / *croak* 1460 / *creak* 1325 / obs. *crook* 1325, *didder* 1375 dial. = *dadder* 1483. obs. exc. dial. = *dodder* 1617, all meaning 'shake, tremble', *diddle* 'cheat' 1806 = *daddle* 1886, *titter* 1374 / *totter* 1200 / *teeter* 1846, *flitter* 1542 / obs. *flatter* 1375 / *flutter* OE, *spittle* 1480 / *spattle* (obs. exc. dial.) OE / obs. *spettle* 1422.

Phonic variation of the root implies the changes in content outlined above (7.8.—10. and 16.—17.). Cf. *chitter* and *chatter*, *clip* and *clap*, *tip* and *tap*, *drip* and *drop*, *hip* and *hop*, *jig* and *jog*, *sip* and *sop*, *tip* and *top*, *tit* and *tot*.

However, not all of the words exist on the same synchronic plane, as the list shows. Some are obsolete. A few are dialect variants of StE forms with a vowel of slightly different acoustic qualities (cf. *putter/potter*, *champ/chomp*, *stamp/ stomp*). Others seem to have had restricted currency anyway (as *clitter*, *dib*, *flack*, *flacker*, *higgle*, *jibber* a.o.). But in general, the expressive principle itself does not seem to be bound up with certain periods as are other phonemic or morphological patterns, so I have thought it legitimate to group ablaut variants together.

Word coining through prothetic *s*

7. 83. We have already referred to the modification of roots by means of a prothetic *s*. We give here some more examples: *scrag* 1567 which the OED cannot explain is obviously a variant of *crag* 1300; *scratch* 1474 is a variant of obs. *cratch* 1320; obs. *scrawl* 'sprawl' 1380 is a variant of *crawl* 1300; *scrunch* 1825 is a variant of *crunch* 1801; obs. *scringe* 1608 is the variant of *cringe* OE. The Sc word *slump* 1718 for which the OED assumes a LG etymon is nothing but the variant of *lump* 1300; dial. *squench* 1535 is the variant of *quench* 1200; *squash* 1565 is the variant of *quash* 1387; obs. *squeasy* 1583 is the variant of *queasy* 'squeamish' 1459; *squelch* 1620 is the variant of *quelch* 1659; *snick* 'snip, nick' 1700 is the variant of *nick* 1523 (infl. by *snip*); *snip* 1586 is the variant of *nip* 1393 (or a variant of *snap*); *speer* 1866 is an American and English dial. variant of *peer* 1591 (perh. influenced by *spy*).

There is no denotative semantic difference between the variants; the prothetic *s* seems to be merely playful. At any rate, the opposition *s* ~ zero has no derivative value synchronically.

Variation through voicing resp. unvoicing of the consonant(s)

7. 84. We find many pairs of words that are differentiated formally by the opposition 'absence of voice ~ presence of voice'. But the opposition is not a derivative principle. A very few words are used synonymously, while others, marked as such (at least in part), are not synonymous for one and the same speaker. *Snicker* 1694 and *snigger* 1706 are pretty synonymous, so are *smutch* 1530 and *smudge* 1430. The difference is often one of dialect only or of earlier and later usage (if this historical difference was not also one of dialectal variation, which it is impossible to tell). *Hack* 1200 is matched by Sc *hag* 1400, *sludge* 1649 by dial. *slutch* 'mud, mire' 1669, *toss* 1506 has a dialect variant *doss* 1583. The Old English word *scringan* 'shrink' is also represented by the form *scrincan*, *tuck* 13.. and *tug* 1225 are often used interchangeably in early documents, according to OED, and *springle* 1502 is now rare or archaic for *sprinkle* 1400. Original *grutch* 1225 changed into *grudge* 1450. But the partial synonymousness which dictionaries give for some pairs will not be felt by one and the same speaker: *grabble* 1579 is hardly used for *grapple* 1530, nor is *sniffle* 1819 interchangeable with *snivel* 1400 (as in *snivelling coward*), and *totter* 1200 is the common word while *dodder* 1617 is hardly known except in such expressions as *a doddering fool*. *Haggle* 1583 is commonly used with the meaning 'bargain' and is different from *hackle* 'hack, cut roughly, mangle' 1579.

The semantic differences between *sop* and *sob*, *tap* and *dab*, *pat* and *bat* also show that, though the sound value of voiced and voiceless consonants is made use of in the coining of expressive words, the opposition 'absence of voice ~ presence of voice' has no derivative relevancy, i.e. no grammatical standing (cp. 7. 9)[1].

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[1] My manuscript had long been completed when I read H. Wissemann, Untersuchungen zur Onomatopoiie. The book covers similar ground insofar as it investigates, by way of experiment, the general problems of the coining of onomatopoeic words. It deals only with what I have called 'direct imitation' (Schallnachahmung). As for the value of speech sounds and several general principles, Wissemann has arrived at results similar to my own, while in other respects (for instance the treatment of initial symbols) our interpretations differ. See my review of the book in Indogermanische Forschungen 64 (1959) 183—187.

VIII. MOTIVATION BY LINGUISTIC FORM:
ABLAUT AND RIME COMBINATIONS

8. 1. Ablaut and rime gemination are based on the principle of coining words in a phonically variated rhythmic twin form. As I hope to show later, such combinations are essentially pseudo-compounds, motivated by the significants, whether they are made up of two real morphemes (as *singsong | walkie-talkie*), of only one sign (as *chitchat | popsy-wopsy*), or whether they are entirely unmotivated by semantic content (as *flimflam | boogie-woogie*). They are not therefore compounds comparable to such types as *rainbow* or *colorblind*, which are grammatical syntagmas based on a determinant / determinatum relationship. An extensive collection of these twin forms, based on OED, has been made by Eckhardt[1], nonce-words used by various writers are to be found in Jespersen[2]. In my lists, I have given only the most commonly known words (though in other places I have also used rare or obsolete combinations for the purpose of demonstrating certain points of linguistic interest), adding recent Americanisms which have not been mentioned in former studies. Not all of them have general currency, however[3]. Besides this, my chief interest has been to raise the question of the linguistic relevancy of twin words and to discuss their status in word-formation, a problem which has so far been neglected. These formations are regularly omitted in older grammars, while recent handbooks[4] include them without, however, noticing or mentioning their particular linguistic status. But before going into this I shall give a description of both types.

Ablaut combinations

8. 2. 1. Ablaut combinations are twin forms consisting of one basic morpheme, sometimes a pseudo-morpheme, which is repeated with a different vowel in the other constituent. Types *chitchat* and *singsong* illustrate the most frequent forms of ablaut gemination, i.e. twin words with the vowel alternation [ı - æ] and [ı - ɒ]. The former corresponds to earlier [ı - a] which is a well known form of apophony in Indo-European languages. The great majority of ablaut combinations belong to this type.

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[1] E. Eckhardt, Reim und Stabreim im Dienste der neuenglischen Wortbildung. Englische Studien 72 (1937/38) 161—191.

[2] O. Jespersen, A Modern English Grammar. Part VI. p. 176—182. Copenhagen 1942.

[3] I have compiled my material from the Dictionary of Americanisms and from articles in American Speech as far as Americanisms are concerned.

[4] H. Koziol, Handbuch der englischen Wortbildungslehre, pp. 214—218. Heidelberg 1937. — O. Jespersen, op. cit. footnote 2.

8. 2. 2.

bibble-babble 'idle talk' 1532
chitchat 'gossip, small talk' 1710
click-clack 'the sound of clicking and clacking' 1782
clink-clank 'jingle of words' etc. 1679
clitter-clatter 'tittle-tattle, chatter' 1535
dilly-dally 'loiter, trifle, waste time' 1610
dingle-dangle 'dangle' 1598
drizzle-drazzle 'continuous drizzling rain' 1855 DA
fiddle-faddle 'trifle, gossip, fuss' 1577
flimflam 'idle talk, rubbish, deception' 1538
gibble-gabble 'gabble, senseless chatter' 1600
higgle-haggle 'haggle' 1841
jimjams 'delirium tremens' etc. vg AE, orig. sg = 'knick-knack' 1550
jingle-jangle 'alternation of jingling sounds' etc. 1740
kit-cat 'the game of tipcat', now dial., 1664
knick-knack 'small article of ornament, gimcrack' 1618
mingle-mangle 'confused medley' 1549
mishmash 'medley, confused mixture' 1450
pitpat 'small noise' 1522
pitter-patter 'rapid succession of light sounds' 1425
prittle-prattle 'idle talk, silly chatter' 1556
rickety-rackety 'unsteady' 1895
rickrack 'kind of serpentine braid' 1884 DA
riffraff 'the rabble' 1470
riprap 'foundation or protection wall near the water' 1833 DA
shilly-shally 'hesitate, be evasive' 1700
skimble-skamble 'confused; worthless discourse' etc. 1596
slipslap 'slap repeatedly' 1890
snipsnap 'clever, quick repartee' etc. 1593
ticktack (said of a clock) 1549
tittle-tattle 'idle talk gossip' etc. 1529
whimwham 'trifle, fanciful object' 1529
wigwag 'move lightly to and fro' 1582; signal with a flag 1846
zigzag 'series of sharp turns or angles' etc. 1712.

8. 2. 3.

clipclop (said of the sound of hoofs etc.) 1863
crisscross 'mark with cross lines' etc. 1846
dingdong (said of the sound of a bell etc.) 1560
dripdrop 'drip and drop, drop slowly' etc. 1848
flipflop 'sound of a footfall; somersault' 1661
pingpong 'table tennis' 1900
singsong 'monotonous voice' etc. 1609
slipslop 'weak liquor; twaddle' etc. 1675
ticktock (said of the noise of a clock in American English) 1848
tiptop 'first class, the very best' etc. 1702
wibble-wobble 'move unsteadily' etc. 1847

wishwash 'weak, thin drink; twaddle' etc. 1786, also in similar senses *wishy-washy* 1693 (which as an adjective means 'unsteady, not dependable').

8.2.4.   No other productive forms of apophony have developed. A combination such as *shiffle-shuffle*, a sb for which OED quotes one example (1871), is isolated. I have not treated *seesaw* and *gewgaw* as ablaut combinations partly because they are unanalysable and partly because they are isolated in pattern.

8.2.5.   The member containing the higher vowel always precedes the one that has the lower vowel. This phonic tendency is widespread. The reasons are probably physiological as well as psychological: the smaller distance between tongue and palate for high vowels becomes greater with low vowels in a natural rise from the smaller to the bigger[1]. The psychological value of the opposition is therefore quite logically that between high and low, with the rise preceding the fall.

8.2.6.   The symbolism underlying ablaut variation is that of polarity which may assume various semantic aspects. Words denoting sounds form a large group, the vowel alternation symbolizing the bipolar range of sound possibilities: *click-clack, clink-clank, clip-clop, clitter-clatter, ding-dong, jingle-jangle, pitpat, pitter-patter, slip-slap, snip-snap, tick-tack, tick-tock*. With words expressive of movement the idea of polarity suggests to and fro rhythm: *crinkle-crankle* 'zigzag', *criss-cross, flip-flap, flip-flop, dingle-dangle, nid-nod, wibble-wobble, wigwag, zigzag*. Related to this group are words for games, as *wiggle-waggle, kit-cat, pingpong*, all in a way characterized by two-phase movement. Another aspect of 'to and fro movement' is the idea of hesitation, as we have it in *shilly-shally, dilly-dally, wiggle-waggle, bingle-bangle* (dial.). The same basic concept may lead to the variant of ambivalence, double-faced character, implying the dubious or spurious value of the referent. *Flimflam, jimjam, trimtram, whimwham* all have the original meaning of 'trash, trifle'; the word *knick-knack* also belongs here. Many words have the basic meaning 'idle talk', as *bibble-babble, chitchat, fiddle-faddle, prittle-prattle, ribble-rabble* (from obs. *rabble* 'gabble'), *slipslop, tittle-tattle*. Cp. also the adjective *skimble-scamble*, applied to rambling talk. In various ways depreciative (on the basis of 'ambivalence') are nominal combinations such as *mishmash, mingle-mangle, slipslop* (of food or liquor, also as adj 'shoddy'), *wish(y)-wash(y), singsong, riffraff*.

8.2.7.   More than half of the combinations have the second element for a basis: *bibble-babble, chitchat, clitter-clatter, crisscross, dilly-dally, dingle-dangle, gibble-gabble, higgle-haggle* (the word *higgle* does actually exist, but it is not in general use), *knick-knack* (historically from now obsolete *knack* 'pretty artifice, trinket'), *kitcat, mishmash, pitpat, pitter-patter, prittle-prattle, riprap, shilly-shally* (from *shall I?*), *slipslap, slipslop, tittle-tattle, skimble-scamble* (from now dial. *scamble* 'scramble'), *wibble-wobble, wigwag, wishwash*.
   The number of variations based on the first elements is much smaller: *drizzle-drazzle, mingle-mangle* (historically derived from *mingle*, the word

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[1] Cp. the opposite tendency in Turkish, however. See my article Alliteration, Ablaut und Reim in den türkischen Zwillingsformen. Oriens 5 (1952) 60—69.

would today appear motivated by both elements, at least to many speakers), *ticktack, ticktock, rickety-rackety* (I have considered the onomatopoeic words *clipclop, dingdong, pingpong* as consisting of two expressive elements, though actually the sound words *clip, ding, ping* are recorded earlier than the twin words).

Motivated by both elements (but see below 8. 5) are *click-clack, clink-clank, clip-clop, ding-dong, ping-pong, jingle-jangle, snip-snap, flip-flop, drip-drop, fiddle-faddle, singsong, tiptop*.

Entirely unmotivated are the 'trifle' words *flimflam, jimjam, trimtram, whimwham* (*whim* 1641 is more recent than *whimwham* 1529, *flam* 'trick' 1625 is later than *flimflam* 1538), and two loans from French, *riffraff* and *zigzag*.

Rime combinations

8. 3. 1.   Rime combinations are twin forms consisting of two elements (most often two pseudo-morphemes, i.e. fanciful, meaningless sound clusters) which are joined to rime. Rime is obviously the basic factor in these combinations, and to speak of 'repetition with change of initial consonants' (Jespersen and Koziol) is to miss the point. Admittedly the choice of the initial consonants is not arbitrary, but the characteristic mark of this type of twin words is that they rime.

8. 3. 2.
boogie-woogie 'a certain style of playing blues' recent American English
claptrap 'nonsensical talk' etc. 1731
even Stephen 'exactly even, without any advantage to either side' 1866 DA
flibberty-gibberty 'frivolous, flighty' 1879
flubdub 'useless talk, bunk', also 'sloppy, error' 1888 DA
fuddy-duddy 'foolish, fussy, ineffective person' 1904 American Speech 16. 229
      (1941)
fuzzy-wuzzy 'nickname for a Soudanese warrior' 1892
handy-dandy 'a children's game' 1362; also in obsolescent meaning 'fine'
hanky-panky 'jugglery, trickery' etc. 1841
harum-scarum 'reckless, careless, disorganized' 1691
heebie-jeebies 'the blues; the state of being terrible scared' 1926
helter-skelter 'disorderly, pell-mell' etc. 1539
higgledy-piggledy 'confusion' etc. 1598
hobnob 'to drink together' etc. 1713
hocus-pocus 'jugglery, trickery' 1624, also in form
hokey-pokey
hodge-podge 'stew of various ingredients, medley' etc. 1426
hoity-toity 'patronizing, snobbish, pretentious' etc. 1668
holus-bolus 'all in a lump' 1838 American Speech 27. 18 (1952)
hootchie-kootchie 'burlesque or indecent dance' 1899 DA
hotsy-totsy 'fine' recent American English
hubble-bubble 'narghile' 1634
hugger-mugger 'secrecy, muddle' etc. 1529
humdrum 'bore' etc. 1553
hurdy-gurdy 'kind of barrel organ' 1749

hurly-burly 'tumult, confusion' etc. 1539

hurry-scurry 'great hurry' 1732

hy-spy 'a boys' game' (in U.S. usually *I spy*) 1777

killer-diller the substantive equivalent of *super-duper*, common American English, though not in dictionaries

loco-foco 'in U.S. a member of the Equal Rights Party, later Democrats in general' 1835 DA

lovey-dovey 'sweetheart' etc. 1819

mumbo-jumbo 'fetish; deliberate mystification' 1738

namby-pamby 'weakly sentimental in style, affected' 1726

peepie-creepie 'a portable television camera' 1952 American Speech 28. 208 and 211 (1953), also called *creepie-peepie*

popsy-wopsy 'little girl; father' 1887

pokemoke 'a swindle' (prob. infl. by *hokey-pokey*) 1862 DA

pow-wow 'a noisy assembly', orig. 'sorcerer, council of the North-American Indians' 1624

ragtag 'the rabble' 1820

raggle-taggle adj = *ragtag*, Shorter OED and Webster, no date. There is an American song "The raggle-taggle gypsy"

ram-jam 'crammed full' 1879

razzle-dazzle 'riotous intoxication, jollity' etc., 'fine' (said of a football player) 1889 DA

roly-poly 'kind of pudding; short and pudgy' 1601

rowdy-dowdy 'rowdyish' 1854

rumble-tumble 'bad cart or carriage; sloppy' 1801

sacky-dacky (in American army slang of World War II = 'one who suffers from spiritual depressions and complexes' American Speech 21. 238 (1946)

super-duper 'excellent' recent American slang

slang-whang 'nonsense, abusive talk' 1834 DA

tagrag 'the rabble' (now only in *tag, rag, and bobtail*) 1583

teeny-weeny 'tiny, very small' 1894

titbit 'a choice morsel' 1640

tootsie-wootsies 'feet', the singular also 'sweetheart' 1854

walkie-talkie 'kind of radio microphone' 1940 American Speech 21. 115 (1946)

willy-nilly 'without choice, compulsorily' 1608.

8. 3. 3. Variations on the first element are *even Stephen, fuzzy-wuzzy, handy-dandy* (in the original meaning 'children's game' the play is on *hand*, but in recent meaning 'fine' the basis is *dandy*), *hotsy-totsy* (*hot?*), *hurry-scurry* (*scurry* is much later), *hurly-burly* (from *hurl*; *hurly* 'turmoil 1596 is later than the twin word which is recorded 1539), *popsy-wopsy* (only in meaning 'father'), *roly-poly, rowdy-dowdy, super-duper*.

The basis is or underlies the second element in *fuddy-duddy* (*dud* 'ineffective person'), *harum-scarum, helter-skelter* (historically derived from obs. *skelt* 'hasten' 13..), *higgledy-piggledy* (play on *pig*), *hubble-bubble, hi-spy, teeny-weeny* (play on *wee*), *titbit* (not from *tid* adj, as OED explains it, as *tid* is much later), *tagrag* (for *tag* 'rabble' OED has only one instance from Shakespeare, but *gta* is obviously derived from the twin word).

Motivated by both elements are (see, however, below 8. 3. 5) *claptrap, flubdub* (*flub* 'blunder', *dub* 'blundering player'), *humdrum, lovey-dovey, peepie-creepie, walkie-talkie, ragtag, ramjam, rumble-tumble, slangwhang, willy-nilly.*

About 40% of all twin words are entirely unmotivated by linguistic signs: *boogie-woogie, flibberty-gibberty, hanky-panky, heebie-jeebies, hobnob, hocus-pocus, hodge-podge, hoity-toity, holus-bolus, hootchie-kootchie, hugger-mugger, hurdy-gurdy, loco-foco, mumbo-jumbo, namby-pamby, pokemoke, powwow, razzle-dazzle* (in *a razzle-dazzle football player* the combination is motivated by *dazzle*), *sacky-dacky, tootsie-wootsie* (with meaning 'feet', the first element is a play on *toes,* there is no motivation for the word meaning 'sweetheart').

8. 3. 4. The emotional, unintellectual character of rime gemination is illustrated by the fact that the underlying themes are often playfully extended (the endearing suffixes *-y* and *-sie* as well as the playful suffix *-dy, -ty* play a great role). Unanalysable phrases, often of foreign origin, are made into rime jingles: *hodgepodge* is OF *hochepot, powwow* is adapted from an Algonquin word. They appear as mock-Latin in *holus bolus, hocus-pocus, harum-scarum.*

8. 3. 5. As with ablaut combinations, we distinguish certain semantic groups. Rime, the magic fitting together of words, naturally lends itself to being used in the sphere of jugglery, sorcery or the like, which accounts for such words as *hocus-pocus, hokey-pokey, pokemoke, handy-dandy, hanky-panky* (prob. a blend of *hokey-pokey* and *handy-dandy*), *mumbo-jumbo.* Many words connote the idea 'disorder, confusion, tumult' or the like, as *hugger-mugger* (in sense 'muddle, disorderly'), *higgledy-piggledy, hurly-burly, hurry-scurry, helter-skelter, razzle-dazzle, hodgepodge.* As rime combinations are essentially nonserious, they may convey derogatory, contemptuous or ridiculing shades of meaning when used without the intention of being playful. Names for persons are derogatory: *fuddy-duddy, loco-foco, sacky-dacky, humdrum, fuzzy-wuzzy,* the obsolete words *hoddy-doddy* 'simpleton', *huffsnuff* 'conceited fellow'. Nursery words have only a playful character; they are not derogatory: *humpty-dumpty, popsy-wopsy.* Impersonal substantives with a derogatory shade are *hurdy-gurdy, rumble-tumble* 'cart', *ragtag, claptrap.* Adjectives fitting into this group are *namby-pamby, flibberty-gibberty, hoity-toity, rumble-tumble.*

8. 3. 6. The frequency of certain initial consonants and of certain alternations of initial consonants is striking. We note the great number of first elements beginning with [h]. In many cases, it is the underlying basis which accounts for the fact, as in *handy-dandy* (*hand*), *hodgepodge* (F *hochepot*), *hurly-burly* (*hurl*), *hurry-scurry* (*hurry*), but [h] is an unetymologizable element in *hubble-bubble, helter-skelter, higgledy-piggledy* a.o. (see list). Though early combinations with an etymological [h] may have played a part in the development, it seems more probable that the preference for the sound is due to some irrational symbolism. As Biese[1] points out, a third of the combinations Müller[2] collected

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[1] Y. Biese, Neuenglisch tick-tack und Verwandtes. Neuphilologische Mitteilungen XL (1939) 146ff.

[2] M. Müller, Die Reim- und Ablautkomposita des Englischen. Straßburg diss. 1909.

begin with [h]. The sound does not, however, occur initially with second elements. Favorite initials with second elements are [p] and [w]: *namby-pamby, hanky-panky, hocus-pocus, roly-poly, goosie-poosie* (a nursery word) / *popsy-wopsy, tootsy-wootsy, piggy-wiggy* (a nursery word), *fuzzy-wuzzy, curly-wurly* (a nursery word), Shakespeare's *kickie-wickie* 'wife'.

A comparison between ablaut and rime combinations

8. 4.   Most ablaut combinations have a real morpheme for a basis which is in many cases an expressive word of the 'sound' or 'move' class. There are very few words which are not based on a recognizable morpheme (see above 8. 2. 7). Things are different with rime gemination. On the one hand, there are many more words whose formative elements are obviously not expressive morphemes: *even Stephen, handy-dandy, hodgepodge, harum-scarum (scare), higgledy-piggledy, hotsy-totsy, hy-spy, lovey-dovey, namby-pamby, peepie-creepie, walkie-talkie, roly-poly (roll), rowdy-dowdy, sacky-dacky, super-duper, slangwhang, teeny-weeny, titbit, willy-nilly.* On the other hand, there are many more rime than ablaut combinations which are entirely unmotivated. Their riming constituents do not call to mind any simple word of similar phonetic makeup (see above 8. 3. 3). Practically speaking this means that no basic linguistic sign is required so long as rime itself is preserved. In ablaut combinations, the strict vowel alternation, combined with a definite underlying morpheme, leaves no room for the complete facetiousness that is possible with rime combinations. While both ablaut and rime are basically playful, ablaut gemination is so in a neutrally esthetic way. Rime gemination is facetious, or playful in a childish, even babyish manner. In contrast to ablaut gemination, it also has a sentimentalizing effect (cp. the word *namby-pamby* which was coined as a play on the name of Ambrose Philips). The following passage, pseudo-advertisements in a newspaper, picturing the affected sentimentality of 'broken-hearted' people, illustrates the stylistic use of rime combinations: *Dobbits-Tobbits. Better and most loving. T. Golly-Wolly. Why break heart of Babsie-Wabsie? Wire. Humble lumble. Humble dumble pumble lumble quumble tumble. No more Quumble of lumble pumble pumble*[1]. While the number of words expressive of sound or movement is considerable in the ablauting group, there are none among rime combinations. As a result, we have fewer verbs in the latter group.

The linguistic value and status of variated twin forms

8. 5. 1.   If we consider the strictly grammatical categories of word-formation, i.e. compounding, suffixation, and prefixation, we observe that a composite is a syntagma based on a determinant/determinatum relationship. Whenever a word is not analysable as consisting of meaningful signs, in other words, when it is unmotivated by content, it is not relevant to grammatical word-formation. The question therefore arises whether rime and ablaut reduplications which (at least in principle) are not made up of two real signs, are relevant to

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[1] O. Sitwell, Miracle on Sinai. The Albatross Edition pp. 73—74.

word-formation at all. A sign has two facets, that of the significate (signifié, content) and that of the significant (signifiant, form). Syntagmas such as *rainbow, fatherhood, undo* are motivated by the contents of *rain* and *bow, father* and *-hood, un-* and *do*. This is obviously not the kind of motivation that applies to ablaut and rime combinations. But we may find a motivation by form. It cannot, indeed, be denied that the rhythmic doubling and the elements of ablaut and rime do in fact constitute a motivation, and that these esthetic elements determine the character of the combinations based on them.

8. 5. 2.   According to their motivation, we may distinguish the following types:

sing-song | walkie-talkie   motivation by two signs (but see below)
chit-chat | super-duper   partial motivation by the significate plus motivation
                              by rhythm and ablaut (or rime)
flim-flam | boogie-woogie   motivation by rhythm and ablaut (or rime) only.

All these words are basically motivated by rhythm and ablaut (or rime) underlying the significants of the twin form. Even those combinations which are composed of two independent words do not speak against this essential character of twin words. *Singsong* is not really a combination of two signs comparable to *rainbow*. Though a purely intellectual analysis may define the twin form as a compound, the joining of the two contents is not what makes the characteristic feature of the combination. Nor is *walkie-talkie* just *walkie + talkie*, but we have a playfully matched combination whose elements were attracted to each other, so to speak, by the esthetic element of rime while the putting together of logical contents is more or less incidental. Nobody would consider *cook book* a riming combination as here rime is incidental while the logical content of the constituents is the only relevant fact.

8. 5. 3.   The semantic value of ablaut as well as rime combinations is determined by the particular phonic makeup of the twin form. This form either points to the significate itself (the rule in ablaut combinations), or it connotes the environment where the words originated or are used, or it signifies what their appeal is to the interlocutor (a great many rime combinations are so determined). From the form of an ablaut combination we can draw a conclusion as to the semantic content, which falls under one of the heads described above (8. 2. 6). One of the aspects of polarity is always implied: that of bipolar sound value with words denoting sound, that of to and fro movement with words of the 'move' class, that of ambivalence with words belonging to neither of the preceding groups. Occasionally, motivation by the form of ablaut seems to fail us. *Tiptop, riprap,* and *rickrack* do not appear to fall into any of the three groups posited above. *Tiptop* is a borderline case: it is primarily motivated by the two full signs *tip* and *top* while the ablaut is of secondary importance. The two other words are based on expressive symbolism. *Riprap* is probably imitative of the sound of water. A *riprap* is not just any foundation of loose stones, but one used as an embankment or the like (see the quotations in DA). *Rickrack* is quite recent, so the etymology of DA (from *rack* 'stretch') cannot be correct as *rack* does not mean 'stretch' today. The word is obviously

derived from an expressive morpheme, the same that underlies *rock* vb and G *Ruck*, an assumption which the zigzag form of the braid seems to bear out.

8. 5. 4.   The problem of motivation is more complicated in rime combinations. Riming twin forms are, to a large extent, made up of fanciful elements, i.e. they consist of pseudo-morphemes. As a result, they have a less serious character than ablauting combinations. While the majority of the latter derive from one real morpheme and can therefore point to the significate, those rime combinations which are composed of pseudo-morphemes, cannot give us any clue as to the significate. Playful motivation by the form of the significant is therefore more complete with riming twin words. This applies also to combinations which are partly motivated by the significate. Rime is less serious than ablaut. This is probably the reason why ablaut often plays a grammatical role (as in IE languages, cp. *sing / sang / sung*) whereas rime never assumes any grammatical function at all.

The higher degree of purely playful motivation in rime combinations gives those words their particular stylistic quality. In general, they are indicative of the speech environment where they originated or where they are used. Of the examples in our list, quite a number are slang terms: *flubdub, heebie-jeebies, hoity-toity, hokey-pokey, hootchie-kootchie, hotsy-totsy, lovey-dovey, sacky-dacky, super-duper, ram-jam*. Others belong to the nursery: *handy-dandy, hy-spy, humpty dumpty, popsy-wopsy* (or slang), *tootsie-wootsie* (or slang), *piggie-wiggie* and other 'baby talk' words which I have not listed. Even those which are standard English usually betray by the rime jingle their origin in familiar, jocular speech: *harum-scarum, helter-skelter, hodgepodge, humdrum, hurdy-gurdy, hanky-panky, fuddy-duddy, fuzzy-wuzzy, hocus-pocus, titbit, ragtag. Walkie-talkie* and *boogie-woogie* are perhaps the best examples of this type. They have a pronounced slangy ring, but they form part of the common standard vocabulary as there are no 'serious' equivalents for them. Ablaut combinations, despite their emotional tinge, are hardly ever slangy. The only word I can think of is the vulgar Americanism *jimjams*.

8. 5. 5.   With regard to rime motivation, one important point has to be taken into consideration—that of the length of rime combinations. Rime is either less felt or not at all in reduplicated monosyllables, at least when the words are forestressed. While *hifi*, with double stress, is felt to be a rime jingle (the rime was undoubtedly the reason for its coining, as the full combination *high fidelity* has no [aɪ] in the second element), nobody would consider *hobo* a rime word, and different speakers are differently struck by such words as *bigwig, nitwit, humdrum, hobnob, powwow, hubbub, claptrap*. It will, however, be noticed that the preceding words are all emotionally motivated and have a depreciative tinge, with the exception of *hobnob*. The specific character of the content seems to indicate that the words were coined as rime combinations while the fact that in many words rime is not felt to be present seems to show that, like any motivation (cp. the loss of motivation by content in such historic composites as *heirloom, cupboard, shepherd*), that of rime also may become obliterated.

8. 5. 6.   To sum up: while compounding, prefixing, and suffixing have a pri-
marily practical purpose, i.e. that of signalling intellectual messages, rime and
ablaut subordinate the intellectual purpose of signalling to the emotional one
of playing. The type of emotional motivation we have in rime and ablaut
combinations must not be confused with that which we find in appreciative
suffixes. In *dadd-y* from *dad*, the suffix *-y* is a complete linguistic sign expressive
of emotion. In ablaut and rime combinations, emotion is not expressed by a
sign, but suggested only by the form of the significant: twinning combined
with phonetic alternation. Adopting Bühler's theory of the threefold aim of
human speech, we would say that the function of the presentation (Darstellung)
of an intellectual message is subordinated to the functions of expression
(Ausdruck) and appeal (Appell). The linguistic factors of speaker and inter-
locutor have the upper hand over the presentation of the matter spoken of,
the extent of emotional motivation being greater in rime than in ablaut
combinations.

Gemination and stress

8. 6.   There is no fixed stress pattern for ablaut and rime combinations.
OED gives double stress, for instance, to *fiddle-faddle, tittle-tattle, snipsnap,
tick-tack, pitter-patter, humdrum, hugger-mugger, hurdy-gurdy, hurly-burly*
whereas Webster has forestress for the same combinations. There is not
much to be gained from such contradictory indications which are partly
due to a lack of distinction between basic patterns and environmental variants.
The stress criterion is not needed to establish the combinations as morpho-
logical units since they are characterized as such phonically and rhythmically.
Even so, it is interesting to note obvious trends of stressing.
   Combinations in which the idea of polarity is no longer emphatically in
evidence, in other words combinations in which the emotional motivation is
not underlined, have forestress. This applies to most ablauting twin forms
used as substantives or verbs. In emphatic use, sound and move words,
especially when functioning as subjuncts (adverbs) are double-stressed:
tick-tock, click-clack, ding-dong. The emotional element of playfulness prevails
in rime combinations. As a result, more words are pronounced with double
stress. But again, where the emphatic character of a word has receded in
favor of intellectual content, rime combinations tend to be forestressed too.
This is the rule with monosyllabic themes, as *claptrap, humdrum, flubdub,
powwow, titbit, hodgepodge, hobnob*. A few longer words join this group, though
individual practice varies: *fuddy-duddy, hurly-burly, hurdy-gurdy*. Most rime
words of this latter type, however, have two stresses: *boogie-woogie, fuzzy-
wuzzy, hanky-panky, hocus-pocus, harum-scarum, heebie-jeebies* (also heard
with forestress), *hoity-toity, hotsy-totsy, hootchie-kootchie, holus-bolus, humpty-
dumpty, lovey-dovey* (also heard with forestress), *mumbo-jumbo, popsy-wopsy,
peepie-creepie, walkie-talkie, teenie-weenie, willy-nilly, higgledy-piggledy*.

8. 7.   Triple cbs also occur, though less frequently and in certain forms only.
Repetition of a symbolic word is the most frequent. Exs are *scuff-scuff-scuff,
drip-drip-drip, jig-jig-jig* (Lawrence), *tong-tong-tong* (Lawrence, q. Jesp. 10. 31).

Ablaut-variations are rare. Jesp. quotes *fiss-fass-fuss*, *flip-flap-flop*. Cp. also F *pif paf pouf*, *bim bam boum*, *plic ploc plac* (for the noise of rain, q. Ny 17, 24, 25) *zig zin zon* (said of fiddle, q. Spitzer Stilstudien 1. 92, München 1928), G *bim bam bum*, *piff paff puff*. Impure triple cbs we have in *snip-snap-snorum* 'a game of cards', *tit-tat-toe = tip-tap-toe = tick-tack-toe* 'a children's game.'

Historical remarks

8. 8.   Gemination is very old in the Indo-European languages, but only *rime*-gemination apparently. We have it, indeed, in Old English, but all combinations belong to type *word-hord*, i.e. they represent words joined for the sake of rime. They have a poetic character (see Müller, 1) but the playful or facetious element of modern words is lacking. Ablaut variation is more recent. Such combinations are comparatively rare in Middle English (see Müller 2—4; they are also infrequent in Middle High German, cp. Wi 13. 3). Among the earliest recorded ablaut forms are *pitter-patter* 1425, *mish-mash* 1450, *ribble-rabble* 1460, *riff-raff* 1470, while examples of early rime combinations are *handy-dandy* 1362, *hiddy-giddy* Sc, *hodge-podge*, now obs. *hudder-mudder* (all 15th c.). Both rime- and ablaut formations increase in the 16th century. After 1600 (for rime combinations) and 1650 (for ablaut combinations) there follows a period of far lower productivity. Around 1800 a new rise begins, with rime combinations being much more in favor than ablauting twin words (see the diagrams in Biese 204). In times when the linguistic and literary standards of society are rigid and conventional, variated gemination, as having a popular or emotional character, will not be much expected. Hence the absence of such playful formations in the older stages of English, hence also, with the change of mentality in the Elizabethan period, the upsurge of productivity during the second half of the 16th century, and again, in more recent years, a new rise in such environments as are not governed by restraining literary tendencies or social codes (therefore obviously much more frequent at present in American English).

IX. CLIPPING[1]

9. 1. 1.   Clipping consists in the reduction of a word to one of its parts. It would, of course, be erroneous to think that the new word is nothing but a shorter form with no linguistic value of its own. It is true that the information received from a native speaker will probably be the one I have tentatively given: *mag* is short for *magazine*, *math* is short for *mathematics*. The difference between the short and the long word is obviously not one of logical content. The same informant, asked about the difference between *book* and *booklet*, would say that a *booklet* is a small book, thus adding the logic element of "small". What makes the difference between *mag* and *magazine*, *math* and *mathematics*, is the way the long word and the short word are used in speech. They are not interchangeable in the same type of speech. *Magazine* is the standard term for what is called *mag* on the level of slang. The substitution of *Mex* for *Mexican* implies another shift in linguistic value in that it involves a change of emotional background, based on the original slang character of the term. Moreover, the clipped part is not a morpheme in the linguistic system (nor is the clipped result, for that matter), but an arbitrary part of the word form. It can at all times be supplied by the speaker. The process of clipping, therefore, has not the grammatical status that compounding, prefixing, suffixing, and zero-derivation have, and is not relevant to the linguistic system (la langue) itself but to speech (la parole).

The moment a clipping loses its connection with the longer word of which it is a shortening, it ceases to belong to word-formation, as it has then become an unrelated lexical unit. The speaker who uses the word *vamp* has no idea that historically the word has its origin in *vampire*. An American who speaks of *pants* does not think of the word as the shortened form of *pantaloons*. The study of such words has become a lexicological matter.

It is with the reservations just made that clippings are treated in this book.

9. 1. 2.   There are different kinds of clipping: 1) Back clipping (lab for laboratory). 2) Fore-clipping (plane for airplane). 3) Clipping-compounds (navicert for navigation certificate; Eurasia for Europe + Asia).

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[1] K. Sundén, Contributions to the Study of Elliptical Words in Modern English. Uppsala 1904. — E. Wittmann, Clipped Words: A Study of Back-Formations and Curtailments in Present-Day English. Dialect Notes vol. IV. Part II (1914), 114ff. — L. Müller, Neuenglische Kurzformbildungen. Gießen 1923 (Gießener Beiträge 2). — W. Horn, Sprachkörper und Sprachfunktion. Second edition. Berlin 1923. — O. Jespersen, Monosyllabism in English (Linguistica 384ff.) see also the reference in Koziol 219.

Back-clippings

9. 2. 1.   Types **lab** (laboratory) and **pub** (public house)

The beginning is retained. The unclipped original may be either a simple word or a composite. The curtailments are made regardless whether the remaining syllable bore the stress in the full word or not. *Microphone* (with stress on the first), *gymnastics* (with stress on the second), *pantaloons* (with stress on the last syllable) are treated alike. Examples are:

9. 2. 2.   *ad* (advertisement), *bike* (bicycle), *cable* (cablegram), *coke* (coca-cola),
doc (doctor), *deb* (debutante), *exam* (examination), *gas* (gasoline), *gym* (gymnastics, gymnasium), *math* (mathematics), *mike* (microphone), *memo* (memorandum), *prom* (promenade 'dance'), *pram* (perambulator) BE, *polio* (poliomyelitis), *quins, quints* (quintuplets).

Clipped forms of compounds or syntactic groups also exist: *mutt* (muttonhead), *pub* (public house) BE, *pop* (popular concert). *Taxi* is short for *taxi cab* (itself a clipping of *taximeter cab*), but the relation is hardly felt. *Zoo* is phonically isolated from its basis *zoological garden*.

There are infinitely more clippings than have been listed here, but their use is restricted to the slang of special groups: schools, army, police, the medical profession etc. I will give a few instances here: *U* (University), *grad* (graduate student), *Tech* (Technological Institute), *tu* (tuition), *Psyk* (psychology), *loot* (lieutenant) U.S., *cap* (captain), *sarge* (sergeant), *medic* (medical student), *dill* (delirium tremens), *hyp* (hypochondria). From criminal slang are *pen* (penitentiary), *con* (convict), *ref* (reformatory), *dinah* (dynamite), *poke* (pocketbook), *poly* (politician).

Each social milieu has its own vocabulary, but it depends on the influence that milieu exercises upon the general interest whether its speech habits will influence the general public.

9. 2. 3.   The preceding type with an additional pet suffix is represented by
l o o n e y (lunatic), *Aussie, bolshie, commie, Jerry, bookie* (bookmaker), *cabby* (cabman), *middy* (midshipman), *movie* (moving picture), *speakie, talkie, toadie* (toadeater), possibly by *bargee, goalee, townee* (see -*ee* sf).

In nursery language we have *comfy* (comfortable, one of the rare clipped adjs), *grannie, hanky, nightie, pinny, undies*.

9. 2. 4.   First names are, in spoken language, more often used in their clipped
than in their original form. A few instances may suffice: Al (Alfred or Albert), *Ben* (Benjamin), *Con* (Constance), *Fred* (Frederick), *Gyff* (Gyfford), *Lu* (Louisa), *May, Mae* (Mary), *Nick* (Nicholas), *Prue* (Prudence), *Phil* (Philip), *Ray* (Raymond), *Sam* (Samuel), *Tom* (Thomas), *Vee* (Veronica), *Will* (William).

9. 2. 5.   With endearing suffix we have the same type in A b i e (Abraham),
Aggie (Agnes), *Andy* (Andrew), *Archie* (Archibald), *Babbie* (Barbara), *Barney* (Barnabas), *Benny* (Benjamin), *Bertie* (Bertram), *Charlie* (Charles or Charlotte), *Christie* (Christian), *Connie* (Conrad), *Debby* (Deborah), *Eddie* (Edmund, Edward, Edwin) etc., etc.

9. 2. 6.   Clipped surnames also occur with or without suffix (app. not before the 18th c., see Sundén, p. 137): Boney (Bonaparte), *Dizzy* (Disraeli), *Lindy* (Lindbergh), *Oppy* (Oppenheimer), *Rossie* (Rossiter), *Biggy* (Biggs), *Solly* (Solomons), *Talley* (Talleyrand), *Montie* (Montgomery). Jespersen (La 9. 7 and MEG VI. 29. 44. 45) quotes surnames used by Dr. Johnson, Thackeray a.o.: *Bozzy* (Boswell), *Sherry* (Sheridan), *Kitch* (Kitchener), *Mac* (Macauly), *Pen* (Pendennis), *Cos* (Costigan) etc.

In familiar intercourse, first names are much more frequent than surnames, which are therefore less often found in a clipped form.

9. 2. 7.   Clippings of prefixed composites are co-op (cooperative association), *co-ed* (co-educational college female student), *prefab* (prefabricated house), *demi-rep* (demi-reputation lady), *non-com* (non-commissioned officer), *intercom* (intercommunication system, a word from World War II aircraft slang).

Fore-clippings

9. 3. 1.   Fore-clippings are less numerous. Examples are plane, *phone, bus, cello, varsity* (university), *wig** (periwig), *van** (caravan), *loo** (lanterloo, a card-game), *brolly* (umbrella).

AE are *coon* (raccoon), *gator* (alligator), *pike* (turnpike).

9. 3. 2.   First names are clipped this way, as Bella (Arabella), *Bert* (Herbert, Albert), *Bess* (Elizabeth), *Dora* (Theodora), *Fred* (Alfred), *Gene* (Eugene), *Mabel* (Amabel), *Mina* (Wilhelmina), *Net* (Antoinette), *Nora* (Leonora, Honora), *Tilda* (Mathilda), *Tina* (Albertina, Christina), *Trix* (Beatrice).

9. 3. 3.   With an additional hypocoristic suffix we have the type in Baldie (Archibald), *Betty* (Elizabeth), *Lottie* (Charlotte), *Netty* (Antoinette), *Sandy* (Alexander), *Tony* (Anthony), *Trixy* (Beatrice).

9. 3. 4.   The type is not in use with surnames. Jespersen rightly assumes that this type of name shortening originated in children's language. Children are apt to forget the beginning of a word and retain the end only. Whoever has been in contact with little children will find that this is correct. Children have no use for surnames. That many of the shortened names occur in a strangely disfigured form is another proof of their origin, according to Sweet (The History of Language, p. 26) and Jespersen (in various places, last in MEG VI. 29. 44 and 29. 83). Children are unable to pronounce difficult sounds (which accounts for *Bet, Bessy* in place of *Elizabeth*, for *Mun* from *Edmund*, also for *Biddy* from *Bridget*, for *Fanny* from *Frances*, for *Dol* from *Dorothy*, for *Hal* from *Harry*, for *Sal* from *Sarah*, with substitution of [l] for difficult [r], whilst the same sound is substituted by [d] in *Dick* (for *Rick*, from *Ricard*, the old form for *Richard*). Children like to repeat the same sound (which accounts for *Bob* from *Robert, Mem* from *Emily, Lell* from *Ellen*). I should, however, say that the part played by the adult is as great as that played by the child itself. Children will mispronounce names, as they do any newly heard word. But the mother, grandmother and the rest of the family will lovingly shape the coining once more for it. *Betsy* and *Tetsy* do not look as if the difficult sound [ts] were due to

children's language. It also seems difficult to me to explain *Moll, Molly* resp.
Poll, Polly as a child's misinterpretation of *Mary*, nor do I think a child could
have shortened *Rex* from *Reginald, Ike* from *Isaac, Suke, Suky* from *Susan*.
Why should not grown-ups also play with names in the way children do? As
for variants like *Peggy, Polly, Patty*, Jespersen supposes that "they originated
in reduplicative forms with *p* in the second member". The sound *p* is so frequent
with gemination that Jespersen's explanation carries conviction.

9. 3. 5.   Sundén[1] thinks that these names were originally shortenings of OE
longer names which subsequently fell into disuse. With the Norman Conquest,
the system of names was entirely changed and old pet names came to resemble
pet forms of the new names. Thus *Hick* was orig. OE *Hicca*, ME *Hicke* which
came to be phonically associated with *Ricke* f. *Richard*. For many other names
see Sundén 141—171. This may hold for some names, but can certainly not be
considered as the general formative principle.

9. 3. 6.   Fore-clipped cpds are a weak type in English. The word *cobweb* is a
case in point[2]. OE *ātor-coppe* 'spider' probably gave rise to an unrecorded form
ātor-coppe webbe which was then clipped like G *(Eisen)bahnhof, (Wal)fischbein,
(Sechs)wöchnerin*. A recent instance is *paperboy* for *newspaper boy*.

The middle of the word is retained

9. 4.   Clippings with the middle of the word retained are infrequent. The
type is instanced by f l u fr. *influenza*, *tec* (detective), *polly* (apollinaris), first
names such as *Liz* (Elizabeth), *Fy* (Seraphima), *Lum, Lom* (Columbus),
Tave (Octavia), *Lige* (Elijah), *Ves* (Sylvester), *Phronie* (Sophronia), *Tish*
(Letitia)[3]. Jespersen (La 9. 7) holds that "the middle is never kept as such
with omission of the beginning and the ending", but in MEG VI. 29. 7 his
wording is less strict: "Very few words are shortened in (this) way." But still
he is disinclined to accept the type, explaining *tec, Liz, Milly* "from a rapid
pronunciation in which the first vowel was syncopated". In *flu* "neither the
beginning nor the end would be likely as stumpwords". Why? *Polly* may be
due to association with the feminine name, but otherwise it is scarcely possible
to deny the existence of the type. *Taters* (*taties*) (potatoes) which Jespersen
lists as an example, is a fore-clipped word in which the end is 'adaptad' as in
feller fr. *fellow*.

Clipping-compounds

9. 5. 1.   The type c a b l e g r a m fr. *cable telegram* illustrates the process of the
clipping of an overlong cb. One part of the original cb most often remains
intact. Exs of what we may call clipping composites are *linocut* (linoleum cut),
capacitance (capacity + reactance), *mailomat*, the name of a postal machine

[1] Sundén, K. F., On the Origin of the Hypocoristic Suffix *-y (-ie, -ey)* in English
(Sertum Philologicum Carolo Ferdinando Johansson Oblatum). Göteborg 1910,
pp. 131—170.

[2] W. Horn in Archiv für das Studium der neueren Sprachen 185. 119 (1948).

[3] J. Combs, Language of the Southern Highlanders, PMLA 46. 1313.

(mail automat; *automat* is not a common noun, but the trade name of a well known type of New York restaurant, the Horn and Hardart establishments), *travelogue* (*travel* + *logue* 'speech' as in *prologue, epilogue*). *Eurasia* (Europe and Asia), *Australasia, Americanadian, Amerindian, Aframerican, pulmotor* (pulmonary motor), *paratrooper* (parachutist trooper). Cp. also such cbs as *news boy, news vendor* for *newspaper boy, newspaper vendor*, G *Ölzweig* for *Ölbaumzweig*. American journalese are such words as *cinemactor, cinemusic, musicomedy, radiorator, zebrass*.

Clipped composites are common with technical terms. *Co-* is a clipping for *complement* in astronomic terms such as *co-latitude, co-longitude, mono-* in physical chemistry is short for *monomolecular*, as in *monolayer, monofilm, micro-* is short for *microscopic* in *microelement, microfilm* etc., *hydro-* is a clipping from *hydrogen* in technological terminology while it stands for *hydrozoa* with zoological terms; *oxy-* is short for *oxygen* in terms of chemistry, *photo-* stands for *photography* in *photo-process, photo-radiogram, photo-electrotype*.

9. 5. 2   It is chiefly the first element that is clipped as the foregoing exs show. In *electrocution* clipping has affected the second element. In other cases, both members of a cb have undergone a clipping, as in cbs of the type navicert (navigation certificate). The type word is a coining of World War II. Other instances are *Westralia*, the international words *comintern* (combining *communist* and *international*) and *cominform* (communist information). Clippings of this type are less frequent in English than they are in German where there are such words as *Minko* (Minderwertigkeitskomplex), *Gestapo* (Geheime Staatspolizei), *Stuka* (Sturzkampfflugzeug), *Jabo* (Jagdbomber), to give only a very few of the numerous words in existence. It is always the beginnings of words which are combined.

9. 5. 3.   With the last group of words we are on the border line between clipped composites, formed as speech-economizing words, and the more or less arbitrary and artificial weldings made up of parts of words chiefly to suggest the fusion of several ideas. The reader may sometimes find that words which have been classed as manufactured words (see 10. 3—6) might have been included in the preceding group. As a matter of fact, the various types sometimes overlap and it is not always easy or possible to draw a clear line. There are degrees and shades of naturalness as well as of clarity, variation declining from the shortening of a cb into mere stunts. *Cablegram* is more natural than the artificial *comintern*, *Caltech* is a still more considerable reduction in size of the long cb *California Institute of Technology*. But *Pickfair*, the name of the home of Mary *Pick*ford and Douglas *Fair*banks is a mere stunt (if I am not mistaken, it was Louise Pound who first used the word for coinings of this kind).

General remarks on clipping

9. 6. 1.   Back-clipping, i.e. preservation of the first part, is practically the rule, as we have seen. Omission of the first part is much less common. Jespersen is inclined to explain fore-clipping as a method which originated in children's language. This is why the type is chiefly represented by fore-clipped first names. Jespersen explains plausibly why certain fore-clippings were neverthe-

less coined by adults: *bus* "which made its appearance immediately after the first omnibus was started in the streets of London (1829), probably was thought expressive of the sound of these vehicles and suggested *bustle*" (La 9. 7); *phone*: "the beginning might just as well stand for *telegraph*"; *van*: "here the beginning would be indentical with *car*" (but it would be so only in spelling); *cello*: "there would be confusion with *violin*". He does not explain *varsity* which by its pronunciation cannot be called simply a clipping of *university*. There are also certainly other elements which determine the kind of clipping (Je himself gives his theory only as "holding in the main"), as clearness, fullness of sound. The latter may account for *coon* as compared with **rac*, *varsity* as compared with **uni*. But cp. A slang *U*, and German student slang *Uni*. I wonder whether the English and American preference for back-clipping is not merely a matter of practicality. If we assume that the main reason for clipping is the desire for shortness, it is certainly more practical to stop short after the beginning than to skip over to a second part. It is also probable that stress has played a part at the beginning (see Sundén 172—194) insofar as the first clippings (see below) are all from fore-stressed words. This may have helped to pave the way for the firm establishing of the pattern.

9. 6. 2. As a rule, clippings are made from the spoken word. There are, however, a few words apparently based on the spelling: *zoo* (zoological garden), *gent* (gentleman, prob. from the former custom of putting the abbreviation *gent.* after a name, as e.g. *William Pinchon, gent.*), *mob* (mobile vulgus), *Jerry* (German), *par* (paragraph). The pronunciation would be different if the clippings were from the spoken word.

9. 6. 3. Except for names of persons, proper names are rarely clipped. Clipped names of cities are *Cin* for *Cincinnati*, *Jax* for *Jacksonville*, *Sacto* or *Sac* for *Sacramento*, *Frisco* (common), *Okey City* (Oklahoma), *Chi* (Chicago), *Philly* for *Philadelphia* (see Me/AL⁴, p. 542—543. *Philly* is used passim in Ch. Morley, Kitty Foyle).

9. 6. 4. Verbs are rarely shortened. The word *canter* 1706 is OE clipping of *Canterbury* (*canter* sb is recorded from 1755). Clipped sbs may be converted, though, and come to look like clipped verbs, such as *perm* (permanent wave), *tot up* 'sum up' (total).

9. 6. 5. Clipped adjs are comparatively rare: *comfy* (comfortable) is common, *pi* (pious) is school slang, and there are such individual clippings (q. by Jesp. VI. 29. 65) as *awk*(ward), *imposs*(ible), *mizzy* (miserable). *Legit* (legitimate) is quoted by Elizabeth Wittman, but *fed* for *federal*, *Met* for *Metropolitan*, *Mex* for *Mexican* are clippings from the original words used as primaries (sbs) or, as in *Met*, from a syntactic group (Metropolitan Opera). But this is the type *pub* which we have discussed above.

9. 6. 6. I have not dealt with shortenings which are due to stress—the dropping of unstressed initial syllables, for instance, as in *mend* fr. *amend*, *fence* fr. *defence* etc. These phenomena do not belong to wf. The reader is referred to Emrik Slettengren, Contributions to the Study of Aphaeretic words in English, Lund 1912, for a short survey to Jespersen VI. 29. 81 and Koziol 657/659, where a full list of references is given.

9. 6. 7.   Clippings are mutilations of words already in existence. They are all characterized by the fact that they are not coined as words belonging to the standard vocabulary of a language. They originate as terms of a special group, in the intimacy of a milieu where a hint is sufficient to indicate the whole. *Prep* may be anything for the outsider, but it has specific meanings in school slang. *Con* is 'conductor' in the slang of American tramps, it is 'convict' in prison slang. Slang is a private language. But circumstances will always have it that words, in our case clippings, of a certain class or group pass into common usage, especially so if publicity is made for them in speeches, newspapers, on the radio, on the screen etc. Not every word has the same chances, and clippings of a socially unimportant class or group will remain group slang. It is usually easy to trace the milieu in which a clipping was coined. In school slang originated *digs* (diggings), *exam*, *grad*(uate), *graph*(ic formula), *gym*-(nastics), *math*, *matric*(ulation), *lab*, *mods* (moderations, an examination at Oxford), *prog* (proctor), *dorm*(itory) and many others. *Consols* (consolidated securities), *divvy* (dividend), *spec*(ulation), *tick*(et = credit) and others originated in stock-exchange slang, whereas *vet*(eran) *cap*(tain), *loot* (lieutenant) and others are army slang. We can place *undies, panties, nighty* (= nursery), *bra, pants, spats* (= shop slang), *ad, mag, caps, par* (= printers and journalists' slang) and undoubtedly a great many others. But there are such as can not with certainty be located. It is impossible to say whether *jap* (1880) originated in newspaper language or not, whereas the words *movie, talkie, speakie* sprang from the masses of picturegoers (see Movie Jargon, by Terry Ramsaye, ASp II (1926) p. 357). *Yank* was coined in the days of the Declaration of Independence (c. 1778), but under what circumstances is not clear.

9. 6. 8.   We have seen that in the course of time a good many slang clippings have found their way into StE. We are then confronted with an important question. How are the conventional, unclipped forms affected by the acceptance of their clipped counterparts? It is against the law of balanced economy in language to have two words for the same thing. In the majority of cases the solution is that the clipping keeps its slangy or colloquial tinge. Through this attachment with its sphere of origin it is isolated from the traditional word, with which, therefore, it does not properly interfere. The other solution in case of homonymy in language is that one of the words gives way to the other. The result is either the ousting of one of the words from the vocabulary, or semantic differentiation to establish the balance of power. Both ways are to be observed with English clippings. In a few cases the full words have died out, so the clippings become new roots. This is the case with *chap* (chapman), *brandy* (brandywine), *mob* (mobile); *cad* is derived from *caddie*, but has semantically lost its connection with it. With other clippings we are no longer aware of their original character or are slowly forgetting it. Who still knows that *cuss* is derived from *customer, miss* from *mistress, gin* from *geneva, brig* from *brigantine, cab* from *cabriolet, navvy* from *navigator, van* from *caravan*?

9. 6. 9.   There is more than one reason for the clipping tendency. Foremost comes the English tendency towards shortness, which goes farther than in other European languages. Monosyllabism is only the natural result to which love for short words finally leads. Clipped words are a great quantitative gain,

though it seems doubtful whether they are anything more than useful and practical. It is not by chance that the quantitative method of modern science was born and reared in Anglo-Saxon countries. The Anglo-Saxon mind is in the main a practical one, and such a method as word-clipping is primarily the work of a practical-minded nation. Owing to their "efficiency", clippings are still more in favor in American English, though refined speech will avoid them, at least for the time being. It may be the feeling of one whose mother tongue is not English that clipping without regard to the organic structure of a word is a kind of disrespect for the language. Clipping-compounds are, I think, less objectionable, as long and clumsy combinations are avoided that way (*monolayer* is certainly preferable to *monomolecular layer*).

There is a certain amount of playing also in clipping, the kind of technical enjoyment felt with new instruments and machines. It is not the purely aesthetic pleasure which lies at the root of rime or ablaut reduplications, for instance.

Historical remarks on clipping

9. 7. 1. Clipping of words is a modern phenomenon. The shortening of a syntactical group, i.e. the phenomenon generally called ellipsis is old (cp. L *cupreum* for *aes cupreum, vidua* for *mulier vidua*, E *capital* (c. letter), *private* (p. soldier) etc.; a full treatment of this is found in Jesp. MEG II. 8. 9; VI. 8. 93/94 and 29. 2)[1]. Old are only shortenings of names, which are not infrequent in Old Greek, OHG and a few other languages (app. not in Latin)[2]. But clipping, as we understand it today, was unknown in ancient times. The following shortened names always retain an ending: OGr *Tēlys* for *Tēlykratēs*, OHG *Wolfo* for *Wolfbrand* a.o. In English, the clipping of common sbs does not seem to be older than the 15th c., whereas clipped proper names are older (see Sundén)[3]. Clippings are most in favor in present-day American English. The headline style of newspapers with its craving for short words at any cost has played a very important part in this development (see Me/AL[4], 182ff and Suppl. 334ff. where a list of reference books and articles is given).

9. 7. 2. To the oldest examples of clipped common nouns belong *coz* 1559 (cousin), *gent* (1564), obs. *mas* 1575 (master), *chap* (chapman) 1577, *winkle* 1585 (periwinkle). Shakespeare has *cowish* (King Lear IV. 2. 12) 'cowardly' which presupposes the sb *cow* for *coward* (which Kittredge, in his edition of King Lear, note to IV. 2. 12 quotes from The Bugbears IV. 2. 48 (ed. Bond, Early Plays from the Italian, p. 126). Sh uses *cock* for *cockboat* (King Lear IV. 6. 19). 17th c. are *van* (vanguard), *quack* (quacksalver), *hock* (hockamore 'Hochheimer'), *brandy* (brandywine), *hack* (hackney), *mob* (mobile), *cit* (citizen),

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[1] For the problem of ellipsis in general see Wilhelm Havers, Handbuch der erklärenden Syntax, Heidelberg 1931, p. 257/258 where a full list of reference is given.

[2] See K. Brugmann, Kurze vergleichende Grammatik der idg. Sprachen, Leipzig 1904, § 366. 5.

[3] Sundén, pp. 144—146 cites *Wulf* f. *Wulfric*. But the clippings were usually suffixed: *Will-oc* f. *Will-beald* etc.

wig (periwig), *phiz* (physiognomy), *plenipo* (plenipotentiary), *sub* (for any sub-word), *tar* (tarpaulin?) 'sailor'.

18th c. are *confab* (confabulation), *console* (consolidated securities), *brig* (brigantine), *gin* (geneva), *cad* (caddie), *hip*, *hyp* (hypochondria), *spec* (speculation), *demi-rep* (app. demi-reputation lady), *yank*. Cp. Swift's remarks in "Introduction to Polite Conversation (q. Jesp. VI. 29. 41): "The only Invention of late Years, which hath any way contributed towards Politeness in Discourse, is that of abbrevating or reducing Words of many Syllables into one, by lopping off the rest . . . Pozz for Positive, Mobb for Mobile, Phizz for Physiognomy, Rep for Reputation, Plenipo for Plenipotentiary, Incog for Incognito, Hyppo or Hippo for Hypocondriacks, Bam for Bamboozle, and Bamboozle for God knows what."

A few clippings from the 19th c. are *cab* (cabriolet), *fan* (fanatic), *van* (caravan), *auto, ad, doc, pants, vet, photo, frat* (fraternity), *prep, lab, math, gym, exam.* This century has coined *perm, movie, talkie, speakie, Jerry, commie, bolshie, mike, san* (sanitorium) and so many more. In their way of clipping (as well as in other domains of word handling) news magazines such as *Time* and *Variety* (esp. the latter) are far ahead of normal usage. "Each has developed a dialect that is all its own" says Mencken (AL[4], Spl. I, p. 337) and quotes a long list of super-coinages, such as *pix* for *pictures, nabe* for *neighborhood, intro* for *introduction, preem* for *premier, ork* for *orchestra* and others. The language of both papers has been heavily criticized in the U.S. as well as in England.

X. BLENDING AND WORD-MANUFACTURING

10. 1. The term blending is generally used for quite heterogeneous things[1]. Koziol's treatment (49—74) comprises words incidentally changed through association with other words (as OE *gifan* f. *gefan*, under the influence of *niman*), folk-etymologies, secretion of sfs, manufactured words. Wentworth also uses the term blend-word in a wide sense, including words, as Shakespeare's *triumpherate* (f. *triumph*, after *triumvirate*), Milton's *witticaster* (f. *wit*, after *criticaster*), which were coined in imitation of phonetically or semantically similar words, Richardson's suffixal derivative *dastardice* (f. *dastard*, after *cowardice*), the jocular re-interpretation of words or phrases, as *Renovated, facultea, Jewnited States* etc. He treats as a blend practically any word that has undergone a formal alteration due to external influences, as *assault* with a latinizing *l*, *advantage* with a latinizing *ad* and other words of this kind.

Blending can be considered relevant to word-formation only insofar as it is an intentional process of word-coining. We shall use the term here to designate the method of merging parts of words into one new word, as when sm/*oke* and *f*/og derive *smog*. Thus blending is compounding by means of curtailed words. However, the clusters *sm* and *og* were morphemes only for the individual speaker who blended them, while in terms of the linguistic system as recognized by the community, they are not signs at all. Blending, therefore, has no grammatical, but a stylistic status. The result of blending is, indeed, always a moneme, i.e. an unanalysable, simple word, not a motivated syntagma. Once the blend *smog* has been formed, it ceases to contain the two (curtailed) morphemes which the word coiner intended to combine in it. Unless speakers have received extralingual information about the composition of the blend, such words as *brunch* (*br*/*eakfast* + *l*/*unch*) *smaze* (*sm*/*oke* + *h*/*aze*) and others are simple words, the subject matter of lexicology.

The only case of curtailed words which have morphemic character and form bimorphemic blends are those whose formation is based on the principle of expressive symbolism, all belonging to the sound and move class. They are dealt with in the chapter "Phonetic Symbolism". With the exception of this pretty strong class, blending has apparently not led to the coining of many common words.

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[1] G. A. Bergström, On blendings of synonymous or cognate expressions in English. Lund diss. 1906. — L. Pound, Blends: their relation to English word formation. Heidelberg 1914 (Anglistische Forschungen 42). — U. Behr, Wortkontaminationen in der neuenglischen Schriftsprache. Berlin diss., Würzburg 1935. — H. Wentworth, Blend-Words in English. Cornell University diss. 1934 (the book is unfortunately not in print; I have only been able to use the abstract which the author kindly sent me). — F. Wölcken, Entwicklungsstufen der Wortbildung aus Initialen (Anglia 76, 317—333. 1957).

Type slithy

10. 2.   The fancy of individuals is responsible for the coining of blend-words for expressive purposes, but whether they catch on or not depends on the constellation of so many circumstances. Lewis Carrol's *slithy* (f. *slimy* and *lithe*), *chortle* (f. *chuckle* and *snort*) have become common property, Shakespeare's *glaze* (f. *glare* and *gaze*) has not, nor has Carroll's *mimsy* (for *flimsy* and *miserable*). The French socialist Fourier coined the word *phalanstère* f. *phalange* (a group in his system) and *monastère*, a word which was anglicized as *phalanstery*. But such a scientific term escapes the test of general use as it is restricted to a certain speech milieu. More or less serious are *slantindicular* (*slanting* + *perpendicular*) 1840, *squarson* (*squire* + *parson*) 1857, *mingy* (*mean* + *stingy*) 1928. The language of commercial advertizing and name-giving favors such coinings (*swimsation* = *swim* + *sensation*, *glamazone* = *glamor* + *amazone*), and writers, especially magazine writers are fond of facetious blends, but they seldom pass into general use. Common are *gerrymander* (proper name *Gerry* + *salamander*), *motel* (*motor* + *hotel*), *smog* (*smoke* + *fog*) 1905, *brunch* (common in AE, *breakfast* + *lunch*). *Smaze* (*smoke* + *haze*) is listed in Webster 1955, but it hardly is in serious use. *Sprig* 14. . may be a blend of *spray* 'twig' and *twig*.

Word-manufacturing: types Socony, sial, radar etc.

10. 3. 1.   More or less arbitrary parts of words may be welded into an artificial new word. This is really a case of word-manufacturing. The process is chiefly used with names of new scientific discoveries, trade-names, names of organizations, new foundations or offices; but occasionally, and chiefly in American English, personal and geographical names are also coined in this way. The chief patterns are letter-words: as S o c o n y (fr. *S*tandard *O*il *C*ompany *of N*ew *Y*ork), and syllable-words, as s i a l (fr. *si*licon and *al*uminium). Often the two methods appear combined, as in r a d a r (fr. *ra*dio *d*irection finding *a*nd *r*ange), or suffixes are added, as in a m m e l i d e (fr. *amm*onia, *mel*am and *-ide*).

10. 3. 2.   Letter-words or chiefly letter-words are *Care* (*C*ooperative for *A*merican *R*emittances to *E*urope), *Unrra* (*U*nited *N*ations *R*epatriation and *R*ehabilitation *A*dministration), *Pluto* (*p*ipe*l*ine *u*nder *t*he *o*cean), *Eto* (*E*uropean *t*heater *o*f operations), *Cominch* (*Com*mander *in C*hief), *Waves* (*W*omen *A*ppointed for *V*olunteer *E*mergency *S*ervice), *Nana* (*N*orth *A*merican *N*ewspaper *A*lliance), *Lox* (*l*iquid *ox*ygen explosive), *Panagra* (*Pan-A*merican *Gr*ace *A*irways), *psia* (*p*ounds *per s*quare *i*nch *a*bsolute), *Yipsel* (*Y*oung *P*eople's *S*ocialist *L*eague, formed irregularly), *athodyd* (*a*ir *th*ermo*dy*namic *d*uct), *dokkie* (*D*ramatic *O*rder *K*nights of *K*horassen, formed irregularly), *Pen* (*P*oets and Playwrights, *E*ssayists and Editors, and *N*ovelists), *futhorc* (the first letters of the runic alphabet, used as a name for the alphabet itself). World War II produced many such words, and the preceding exs are only a very small collection of the words that have been coined. For more instances the reader is referred to one of the several dictionaries of abbreviations. The first world war was less productive, the type having really caught on in the

last years only. Words from the first world war are *Waac* (*W*omen *A*rmy *A*uxiliary *C*orps), *Wraf* (*W*omen's *R*oyal *A*ir *F*orce), *Wren* (*W*omen's *R*oyal *N*aval [*S*ervice]), *Anzac* (*A*ustralian *N*ew-*Z*ealand *A*rmy *C*orps), *Dora* (*D*efense of the *R*ealm *A*ct). Recent are *Nato* (*N*orth *A*tlantic *T*reaty *O*rganization), *Shape* (*S*upreme *H*eadquarters *A*llied *P*owers *E*urope), *Unesco, Seato* and many other organizational names[1]. A recent common substantive is *ufo* (*u*nidentified *f*lying *o*bject), a slang word from World War II is the adj *snafu* (*situation normal, all fogged up*).

10. 3. 3. On the whole, it must be said that the tendency to form letter-words is much weaker than that of quoting a cb by giving the first initial of each word in the form it is pronounced in the alphabet, as *GI, YMCA.* Letter-words are more frequent in German, where the type is instanced by words such as *Agfa* (*A*ktiengesellschaft *f*ür *A*nilinfabrikation), *Hapag* (*Ha*mburg-*A*merika *P*aketfahrt *A.G.*), *Preag* (*Pr*eußische *E*lektrizitäts *A.G.*), *Bamag* (*B*erlin *A*nhalter *Ma*schinenbau *A.G.*) etc. A Swiss word coined during the second world war is *Wust* (*W*aren*u*msatz*st*euer).

10. 3. 4. Letter-words are comparatively new in European languages. The real vogue has set in with our century only. The method is old with Jewish names. In the Middle Ages the custom arose of forming personal names from the initials of a title, name and the father's name, as *Raschi* (fr. *R*abbi *Sch*elomo *J*izchaki), *Rambam* (fr. *R*abbi *M*osche *b. M*aimun), *Schach* (fr. *Sch*abbataj *C*ohen), *Hida* (fr. *H*ayyim *J*oseph *D*avid *A*zulai), to give only a few instances (see *The Jewish Encyclopedia*, New York and London, vol. IX, p. 155). Cf. also the mnemonic words for the possible kinds of syllogisms, as *Bramantip, Camenes, Camestres, Darapti, Darii* etc., app. not in E use before the 16th c[2]. Modern letter-words do not seem to be due to either of the foregoing types.

10. 4. The progress of science, chiefly chemistry, in the 19th c. played a great role in the development of word-manufacturing. The numerous chemical substances and compounds newly discovered called for new words to name them, and the names were chiefly formed by welding parts of the words denoting the constituent elements into an artificial word. Exs are *acetal* (f. *acet*ic *al*cohol) *aldehyde* (fr. *al*cohol *dehyd*rogenatum) *aldol* (f. *ald*ehyde and alcoh*ol*), *alkargen* (f. *alkar*sin and oxy*gen*), *amatol* (f. *am*monium nitr*at*e and trinitr*ol*uene), *carborundum* (f. *carb*on and c*orundum*), *chloral* (f. *chlor*ine and *al*cohol), *chlorodyne* (f. *chloro*form and ano*dyne*), *hydrazine* (f. *hydr*ogen, *az*ote, and *-ine*), *methoxyl* (f. *meth*yl, *ox*ygen, and *-yl*), *phospham* (f. *phosph*orous *am*monia).

From other spheres we derive such words as *cusecs* (f. *cu*bic feet per *sec*ond), *altazimuth* (name of an instrument for determining *alt*itude and *azimuth*).

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[1] Eric Partridge, A Dictionary of Abbreviations. London 1942. — Cecily C. Matthews, A Dictionary of Abbreviations. London (George Routledge and Sons, no date). — George Earlie Shankle, Current Abbreviations. New York (H. W. Wilson Company, no date).

[2] The words are said to have been invented by Petrus Hispanus (Pope John XXI) who died in 1277 (see Rudolf Eisler, Wörterbuch der Philosophischen Begriffe, 4th edition, Berlin 1929, s.v. Schlußmodi).

Trade-names of the type are common (see Louise Pound, Word-Coinage and Modern Trade Names, Dialect Notes, vol. IV, part I, 1913 and Wentworth). A few of the countless words are *Ampico* (American Piano Company), *Nabisco* (National Biscuit Company), *Sunoco* (Sun Oil Company).

Only a few years old is the international word *Benelux*, the Benelux countries being *Be*lgium, the *Ne*therlands, and *Lux*emburg.

10. 5.   Special cases of word-manufacturing are the sfs -*ol* and -*yl* in chemical terminology.

The sf -ol represents the last element of 1) *alcohol* or 2) *phenol*, 3) sometimes it stands for L *ol(eum)* 'oil'. In function 1) it forms the names of substances which are alcohols in the wider sense, as *carbinol, methol*; in function 2) it forms names of bodies belonging to the group of phenols, as *anthrol, cresol*; in function 3) it forms a few technical terms such as *furfurol, indol* (see OED s.v. -*ol* sf).

The sf -yl represents OGr *hyle* 'matter, substance'. This manufactured morpheme forms names of radicals on a NL basis of coining, such as *carbonyl, salicyl, sulphuryl* a.o. (see OED for details). The type was introduced into scientific nomenclature by the German chemists Liebig and Wöhler (c 1830).

10. 6.   Many American place-names are fabricated blends. Towns near the borders of two States are given names which are compounded of clipped parts of the names of the States, as *Dakoming* (*Dako*ta + *Wyoming*), *Del-Mar* (*Del*aware + *Mar*yland), *Calexico* (*Cal*ifornia + M*exico*), *Nosodak* (*No*rth *S*outh *Dak*ota), *Kanorado* (*Kan*sas + Col*orado*). The place-name *Norlina* is blended from parts of the name of the State *Nor*th Caro*lina*, *Colwich* is a blend of *Col*orado and *Wich*ita. Many more of such arbitrary blends are listed in Louise Pounds, *Blends*, and Henry J. Heck, *State Border Place-Names*, ASp. 3 (1928) p. 51. Parts of the names of one or several persons connected with the place to be named were sometimes amalgamated to form the new place-name: *Cadams* is simply the name of one *C. Adams*, *Gilsum* is a blend of *Gil*bert and *Sum*ner, *Caldeno* (the name of a waterfall of the Delaware Water Gap) is fabricated out of the names of three visitors, *C. L. Pascal, C. S. Ogden*, and *Joseph McLeod*. *Rolyat*, a town in Oregon, is the name *Taylor* spelt backward.

Blends of first-names are common, but they are especially frequent in the States. Examples are *Olouise* (*Ol*ive + L*ouise*), *Rosella* (*Ros*e + B*ella*), *Adrielle* (*Adri*enna + B*elle*), *Leilabeth* (*Leila* + Eliza*beth*), *Armina* (*Ar*delia + Wil*helmina*). Only feminine names seem to be blended, but men's names may form part of the blends, as in *Romiette* (*Rom*eo + J*uliette*), *Adnelle* (*Ad*dison + *Nelle*ie), *Adelloyd* (*Ade*lloyd + *Lloyd*). See also Pound, *Blends*.

I have given so little space to this subject as most of the manufactured words form no part of the general vocabulary. The reader who is interested in this type of words is referred to the several books and articles written on the subject.

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æ is placed between ad and af; ɛ between e and f; ŋ between n and o; ɒ, ɔ between o and p; š between s and t; θ between t and u; ʌ between u and v; ž after z.

Principal sense groups of morphemes

absence of: -less, non-, un-, dis-
agent of verbal action: -ant, -er (see also personal sbs)
animal, sfs denoting — s: -er, -erel, -ing

approximation: -ish. See also 're-semblance'
appurtenance: he who belongs to: -an, -ian, -er, -ese, -ist, -ite belonging to (adj): -al, -ial, -an, -ian, -arian

change of state: -en, -ify, -ize
character: having the character of . . .: -al, -ial, -ed, -esque, -ful, -ic, -ical, -ish, -like, -ly, -ous, -some, -y. See also 'resemblance'
cloth: -een, -ette
collectivity: -age, -dom, -ery (-ry), -hood, -ship
condition of . . .: -acy, -age, -ancy (-ency), -ate, -ation, -cy, -dom, -ery, -hood, -ity, -ment, -ness, -ship

degree; prfs denoting —: arch-, over-, proto-, sub-, super-, under-
depreciation: -ard, -by, -ling, -ton, -ish
deprivation: de-, dis-, un-
diminutive, endearing sfs: -ette, -ie (-y), -ikin, -let, -ling
doctrine, see system
domain: -dom

endearing sfs, see diminutive sfs

fee: -age
female, morphemes denoting —, see sex

instance, specific of . . .: see condition
instrument: see agent
intensity: be-

language: -ese, -ic, -ish

negation: a-, dis-, in-, non-, un-
number, prfs denoting —: bi-, demi-, di-, mono-, multi-, pan-, poly-, semi-, tri-, twi-, uni-

opposition: anti-, contra-, counter-

partnership: co-
passive sbs: -ee
personal sbs, sfs forming —: -an, -ian, -arian, -ant, -ard, -by, -ee, -een, -eer, -er, -ess, -ette, -ician, -ie, -ing, -ist, -ister, -ite, -kin, -ing, -ster, -ton
place, morphemes denoting —: after-, back-, by-, down-, forth-, in-, off-, out-, over-, through-, under-, up- / ante-, circum-, em- (en-), epi-, extra-, fore-, inter-, intra-, intro-, meta-, mid-, para-, peri-, post-, pre-, preter-, pro (-amnion), retro-, sub-, super-, supra-, sur-, trans-, ultra- / -age, -er, -ery, -ing, -ment
position, see place, condition
possibility: -able
preference: pro-
purpose, serving the —: -ory

quality, see condition

rank: -age, -dom, -ship
reiteration: re-
resemblance: crypto-, neo-, pro-, pseudo-, step-, vice-. See approximation
result of action: -age, -ing, -ment, -ure
reversal of result: dis-, un-

sex: male: boy-, he-, man-, female: she-, girl-, lady-, woman- / -ess, -ette
slogan, see system
system: -ism

tendency, having a — to: -ive
time, morphemes denoting —: after-, ante-, arch-, ex-, fore-, mid-, post-, pre-, proto-
tool, see agent

Suffixes arranged according to their function

sfs forming sbs: -acy, -age, -al, -an (-ian, -arian), -ance (-ence), -ancy (-ency), -ant (-ent), -ard, -ate, -ation, -by, -cy, -dom, -ee, -een, -eer, -el (-le), -er, -erel (-rel), -ery, -ese, -ess, -et, -ette, -ful, -hood, -iana, -ician, -ie (-y), -ine, -ing, -ism, -ist, -ister, -ite, -ity, -kin (-ikin), -let, -ling, -ment, -mo, -ness, -ship, -ster, -ton, -ure

sfs forming adjs: (those marked 2) form adverbs as well) -able, -al, -an (-ian, -arian), -ary, -ed, -en, -ese, -esque, -ety, -fold 2), -ful, -ic, -ine, -ish, -ive, -less, -ly, -most 2), -ory, -ous, -some, -ward 2), -y

sfs forming vbs: -ate, -en, -er, -ify (-fy), -ize, -le

List of major derivative alternations involving changes of vowel and/or consonant

(arranged according to the suffix or termination of the derivative).

-acy	delicacy/delicate	4. 1. 17; 4. 3. 9
	piracy/pirate	4. 1. 17; 4. 3. 9
	democracy/democrat	4. 3. 4
-al	artificial/artifice	4. 1. 27
	agential/agent	4. 6. 4
	circumstantial/circumstance	4. 6. 4
	differential/difference	4. 6. 4
-ancy, -ency	decency/decent	4. 9
	vacancy/vacant	4. 9
-arian	trinitarian/trinity	4. 12. 3
-ation	creation/create	4. 18. 4
	edification/edify	4. 18. 2
	organization/organize	4. 18. 3
-er	astrologer/astrology	4. 30. 15
	geomancer/geomancy	4. 30. 14
	historiographer/historiography	4. 30. 14
-ess	murderess/murderer	4. 35. 2
-ic	anthracitic/anthracite	4. 43. 11
	anthropomorphic/anthropomorphism	4. 43. 5
	anaemic/anaemia	4. 43. 8
	aristocracy/aristocratic	4. 43. 12
	bronchitic/bronchitis	4. 43. 10
	dramatic/drama	4. 43. 13
	genetic/genesis	4. 43. 9
	monogamic/monogamy	4. 43. 7
-ician	mechanician/mechanic	4. 44. 1
-ism	agnosticism/agnostic	4. 43. 5
-ist	archaeologist/archaeology	4. 52. 8
	atheist/atheism	4. 52. 8
	Atticist/Attic	4. 52. 9
-ity	actuality/actual	4. 55. 5
	atomicity/atomic	4. 43. 5; 4. 1. 27; 4. 55. 5
	capability/capable	4. 55. 4
	ferocity/ferocious	4. 70. 24; 4. 1. 27
	responsibility/responsible	4. 55. 4
	sincerity/sincere	4. 1. 27
	singularity/singular	4. 55. 5
	tenacity/tenacious	4. 70. 24; 4. 1. 27
-ive	affective/affection	4. 56. 2
	authoritative/authority	4. 56. 6
-ize	alchemize/alchemy	4. 57. 10
	classicize/classic	4. 57. 10
	dramatize/dramatic	4. 57. 10
-ous	ambitious/ambition	4. 70. 4
	avaricious/avarice	4. 1. 27
	blasphemous/blasphemy	4. 70. 26
	carcinomatous/carcinoma	4. 70. 25
	edematous/edema	4. 70. 24
	vexatious/vexation	4. 70. 4

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